











January 1972 Vol. 55, No.1



Ambulatory Care

IF MORE MEN CRIE



At least seventy-five out of one hundred adults with duodenal ulcers are men.¹
Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."²

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."²

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."

Big boys don't cry. If more men cr maybe fewer would wind up with duod ulcers. But men will be men—the sum total

their genes and what are taught. Schottst observes that who mother admonishes son who has hurt him that big boys don't cry is teaching stoicism. Crying is negation of everyt society thinks of as made A boy starts defending manhood at an early

Take away str you can take away sympte

There is no question that stress pla role in the etiology of duodenal up Alvarez⁵ observes that many a man with ulcer loses his symptoms the day he shut the office and starts out on a vacation. problem is, the type of man likely to hav ulcer is the type least likely to take vacations or take it easy at work.

The rest cure vs. the two-way action Librax. For most patients, the rest cur as unrealistic as it is desirable. Still, stress factor must be dealt with. And is where the dual action of adjunctive Libran help. Libran is the only drug that

References: 1. Silen, W.: "Peptic Uleer," in Wintrobe, et al. (eds.): Harrison's Principles of Internal Medici 6, New York, MeGraw-Hill Book Company, 1970, p. 2. Wolf, S., and Goodell, H. (eds.): Harold G. I Stress and Disease, ed. 2, Springfield, Ill., Char Thomas, 1968, pp. 68-69. 3. Ibid., p. 257. 4. Sehotts W. W.: Psychophysiologic Approach in Medical Pr Chicago, Ill., The Year Book Publishers, Inc., 1960, 15. Alvarez, W. C.: The Neuroses, Philadelphia, Pa., Saunders Company, 1951, p. 384.

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Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, aution patients against hazardous occupations

caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/ or low residue diets.

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Rhode Island Medical Journal

JANUARY, 1972

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COVER: The Royal C. Taft Building for Out Patients, Rhode Island Hospital. Mr. Thomas P. I. Goddard, Trustee, asked that it "bear the name of Royal C. Taft, as a permanent memorial of the faithful and devoted services which Governor Taft has rendered to our great charity . . ."

Twenty-Seventh Annual Report, Rhode Island Hospital, 1890

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EMANUEL W. BENJAMIN, M.D.

Emanuel W. Benjamin, M.D., formerly head of the Department of Radiology of Pawtucket Memorial Hospital, died July 24, 1971 at Cape Cod Hospital in Hyannis, Massachusetts. He was 71 years old.

Born in New York City, Doctor Benjamin was a 1921 graduate of Columbia University and a 1925 graduate of Columbia College of Physicians and Surgeons.

Doctor Benjamin was on the consulting staff at The Miriam Hospital; was secretary of the Columbia University Alumni Association of Providence and was a member of B'nai B'rith.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association and the American College of Radiology.

EDWARD S. CAMERON, M.D.

Edward S. Cameron, M.D., a practicing Providence physician for more than 50 years, died March 17, 1971. He was 84 years old.

Born in Pawtucket, he graduated from Tufts University in 1910. He interned at Rhode Island Hospital and also received his residency training at Rhode Island Hospital.

During World War I, Doctor Cameron served with the Army Medical Corps, treating at bases in the United States wounded soldiers who had been returned from Europe.

Returning from the Army, Doctor Cameron continued his private practice and served on the surgical staff of Rhode Island Hospital. He was a visiting gynecologist at the Charles V. Chapin Hospital during the years the hospital handled those cases, and when Lying-In Hospital opened, he was on the staff.

From 1947 to 1957, Doctor Cameron was a member of the city's air pollution advisory board. In public speeches, and in letters to the Journal-Bulletin, he decried the smoke of incinerators and the fumes of automobiles. He was a strong proponent of the Westminster Mall as a way to reduce gasoline fumes downtown.

He was a member of the Providence and Rhode Island Medical Societies, the American Medical Association, the American College of Surgeons, the New England Cancer Society, the New England Society of Surgeons, and the Providence Society of Surgeons.

WILLIAM B. COHEN, M.D.

William B. Cohen, M.D., a dermatologist for more than 40 years, died December 31, 1971 at the age of 71.

Born in Providence, Doctor Cohen was graduated from Tufts University Medical School in 1922, and he did postgraduate work at Columbia University.

In 1959 Doctor Cohen's alertness was credited with saving the life of a seven-month-old boy who was suffering from a rare skin disease, exzema vacvinatum. Thumbing through a medical journal he came upon reports of a new serum designed to treat the disease. He immediately called Colorado and a quantity of the serum was flown here the next day.

He was past president of the medical staff of The Miriam Hospital and he was chief dermatologist at the hospital from 1926 to 1960. He was also on staff at The Memorial Hospital, Pawtucket.

Doctor Cohen was a consultant dermatologist at Rhode Island Hospital, Our Lady of Fatima Hospital, St. Joseph's Hospital Veterans Administration Hospital at Davis Park and Fuller Memorial Sanitarium in Attleboro. He was the author of many articles on dermatology published in the Rhode Island Medical Journal.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, the American Dermatological Society, the Atlantic Dermatological Society, and the New England Dermatological Society.

R. CANNON ELEY, M,D.

R. Cannon Eley, M.D., former Professor of Pediatrics and Chief of Pediatrics at Roger Williams Hospital, Brown University, died April 29, 1971. He was a former Boston pediatrician and director of postgraduate training at Harvard Medical School. He was 70 years old.

Born in Suffolk, Virginia, Doctor Eley graduated from the University of Virginia Medical School in 1925. He was a captain in the Medical Corps from 1941 to 1946, first teaching protection from chemical and bacterial warfare, and later doing research in medical intelligence. During this latter part of his work he was among the first to

(Continued on next page)

report on the fluorophosphate nerve gases discovered in Germany.

For his work in helping to restore its medical library which was depleted during the German occupation, Doctor Eley received the Louis Pasteur medal from the Pasteur Institute in Paris in 1944.

A prolific writer for professional journals, he was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, the New England Pediatric Society, the American Pediatric Society, the American Academy of Pediatrics, and the British Pediatric Society.

A A A JAMES H. FAGAN, M.D.

James H. Fagan, M.D., a retired physician, died September 28, 1971 in Naples, Florida, where he had resided since his retirement from private medical practice in 1969. He was 75 years old.

Born in Pascoag, he was graduated from Georgetown College and Georgetown Medical School in 1924.

He was a former chief of staff at Roger Williams General Hospital. He was appointed to the Providence Board of Hospital Commissioners in 1945 and served until 1966.

During World War II, Doctor Fagan, at the request of the U.S. War Department and the Army Medical Corps, organized St. Joseph's Hospital as an emergency medical center for use by casualties in the event of military action off the coast of Rhode Island. He had served during World War I as a first lieutenant with the Army Medical Corps.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American College of Surgeons.

▲ ▲ ▲ GEORGE B. FARRELL, M.D.

George B. Farrell, M.D., of West Warwick, died February 10, 1971 at the age of 76.

Born in Coventry, Rhode Island, he was a graduate of Fordham College and Fordham University Medical School.

Doctor Farrell was very active in high school athletic programs in West Warwick, and he was an incorporator and staff member of Kent County Memorial Hospital. He served in the Army in World War I.

He was a member of the Rhode Island Medical Society and the American Medical Association.

NORA P. GILLIS, M.D.

Nora P. Gillis, M.D., a practicing physician in Providence for 30 years, died March 4, 1971. She was 78 years old.

Born in Summerside, Prince Edward Island, she graduated from McGill Medical University. She served on the staff of Rhode Island Hospital and Charles V. Chapin Hospital. She became an eye, ear and throat specialist and later a surgeon and psychiatrist. In addition to her practice, she was examining psychiatrist for Pembroke College.

She was a member of the Providence and Rhode Island Medical Societies and the American Medical Association.

▲ ▲ ▲ CARL R. GROSS, M.D.

Carl R. Gross, M.D., a retired physician in Providence died April 8, 1971. He was 82 years old. He was for many years the only black general practitioner in Rhode Island.

Born in Providence, he was graduated from Howard Academy in Washington in 1909. He attended the Howard University School of Medicine and graduated in 1913 as senior class president.

He was an amateur historian and had been writing a history of Negroes in Rhode Island, compiling information on the work of black professionals. He was also accorded an honorary degree by Rhode Island College. Doctor Gross also was elected president of the John Hope Community Association and in 1960 he was honored by the Irreprochable Beneficial Association of Providence, which he had served as treasurer for 27 years.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, Providence Tuberculosis Society, Medical Advisory Committee to the Rhode Island Maternal Health Association and the National Conference of Christians and Jews.

He also belonged to the National Association for the Advancement of Colored People, Marathon Club, and the What Cheer Tennis Club.

CHARLES J. HUTCHINSON, M.D.

Charles J. Hutchinson, M.D., of Providence, retired director of health at Brown University, died February 25, 1971. He was 80 years old.

Born in Minnesota, he received both undergraduate and medical degrees from the University of Minnesota.

He served in the Navy during World War I.

From 1950 to 1953 he was chief medical officer of the Boston Naval Shipyard, and before that he was chief of medicine at the U.S. Naval Hospital on Mare Island, California. Doctor Hutchinson, in 1953, was named as Brown health director.

Doctor Hutchinson was a member of the Providence Medical Association the Rhode Island Medical Society and the American Medical Association.

A A A

HARRISON F. HYER, M.D.

Harrison F. Hyer, M.D., an East Providence physician for 40 years, died December 31, 1971. He was 71 years old.

Born in Neptune, New Jersey, he graduated from Hahnemann College in 1924 and Hahnemann Medical School in 1925.

He interned at Ann May Memorial Hospital in New Jersey and the Homeopathic Hospital in Providence (now Roger Williams General Hospital).

He was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

▲ ▲ ▲ WILLIAM L. LEET, M.D.

William L. Leet, M.D., of Providence, director of health for the city's public and parochial schools, died March 4, 1971. He was 68 years old.

Born in Brockton. Massachusetts, he graduated from Norwich University in 1922 and Harvard Medical School in 1929. He interned at Rhode Island Hospital.

He was Commanding Officer of the 455th General Hospital, Army Reserve, when he retired. During World War II, he was a Captain with the Rhode Island 48th Evacuation Unit in the China-Burma-India Theater.

One of his hobbies was the dilemma of gaining or losing weight and in the late 1930's he wrote a book titled "The Right Way to Weigh Right, a Manual of Weight Control."

Doctor Leet was a staff physician at Rhode Island Hospital, Charles V. Chapin Hospital, and the Rhode Island Medical Center.

Doctor Leet was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, the New England Heart Association, the American Health Association, the American College of Physicians, the American Gastroenterological Society. American Society of Internal Medicine, the Rhode Island Cancer Society, and the Rhode Island Tuberculosis and Thoracic Association.

A A A

MARCIUS H. MERCHANT, M.D.

Marcius H. Merchant, M.D., a retired Warren physician, died November 14, 1971. He was 97 years old.

Born in Warren, he was graduated from Brown University and from the College of Physicians and Surgeons at Columbia University in 1901.

During World War I, Doctor Merchant served in France as a regimental surgeon.

Doctor Merchant served as medical examiner in the First District Bristol County, and he was the first president of the Bristol County Medical Association. He served as chairman of the Bristol County Medical Draft Board during World War II and was the first commander of the Warren Post, American Legion.

He was active in numerous associations and civic groups, including the Association of Military Surgeons of the United States; the Rhode Island Commandery, and others. He was also a member of the Rhode Island Medical Society and the American Medical Association.

A A A

JAMES B. MORAN, M.D.

James B. Moran, M.D., a lifelong Providence resident and a practicing physician for 30 years, died April 8, 1971. He was 61 years old.

Born in Providence, he was graduated from Providence College in 1932 and the University of Maryland Medical School in 1936.

Doctor Moran interned at St. Joseph's Hospital and completed his residency at the former Wallum Lake Sanitarium.

He was a lieutenant colonel in the medical department of the 43rd division during World War II. He served in the Pacific war area.

He was on the staff at St. Joseph's Hospital, Our Lady of Fatima Hospital, and Roger Williams General Hospital.

Doctor Moran was a member of the Providence and Rhode Island Medical Societies, the American College of Chest Physicians, Providence College Alumni Association, Tyler Council, Knights of Columbus Sons of Irish Kings, Friendly Sons of St. Patrick and the Metacomet Country Club.

A A A

WILLIAM M. MUNCY, M.D.

William M. Muncy, M.D., of Providence, died July 19, 1971 at the age of 89. He was a former (Concluded on Page 24) Now in a 200-ml. Unbreakable Plastic Bottle

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The Volunteer Health Agencies' Role Today And Tomorrow

Voluntary Health Agencies Can Do Much To Improve Education For Health Occupations

By Ralph C. Kuhli, M.P.H.

It is a privilege to address you concerning the part the professional Registered Nurse could play in the role of the volunteer health agencies today and tomorrow. I know that no organization and no person is formally authorized nor professionally qualified to speak for the hundreds of volunteer health agencies and the million or so employed and formerly employed Registered Nurses in this country — especially on the critical subject of delineating roles. However, I would like to speak for myself, because I have been asked to talk on this complex subject and because my 36 years of experience in education and health has intertwined the roles of voluntary health agencies, Registered Nurses, and now allied health professionals, and it helps me to try to think through how we relate to each other and how we can work more effectively together.

RALPH C. KUHLI, M.P.H., Director, Department of Allied Medical Professions and Services Division of Medical Education, American Medical Association.

Read at 6th Annual Convention of the Rhode Island State Nurses' Association, Providence, R. I. on October 14, 1971.

I speak with some feeling because I came to the American Medical Association from the University of California, where I was Assistant Coordinator of Medical and Health Sciences in the Office of the President and all these subjects came into focus in that large and especially dynamic State. In 1966 I came to the AMA as Secretary of the AMA Council on Voluntary Health Agencies, and in 1967 I became Director of the AMA Department of Allied Medical Professions and Services, which at that time provided staff services for the AMA Committee on Nursing. So I really care, and I welcome this charge to think through what I see as the respective roles of voluntary health organizations, Registered Nurses, and allied health professionals with special reference to education.

About four million people work in the health occupations, making this one of the largest occupational groups in the country! The National Institutes of Health divide the health occupations into four groups: 1. About a million physicians, selected independent practitioners, and allied medical workers; 2. Almost two million nurses and occupations allied to nursing; 3. About a quarter

(Continued on Next Page)

million dentists and dental auxiliary workers; and 4. Perhaps as many as three-quarters of a million environmental health, public health, and other health workers.

Of the total of 334,028 physicians in the United States at the beginning of 1971, 310,845 were active.² American Medical Association membership includes 82 per cent of the physicians engaged in office-based practice, according to statistics of AMA's Center for Health Services Research and Development. Of the 192,439 physicians in office-based practice, 157,837 are AMA members. These figures do not include inactive MDs, interns, residents, hospital staff physicians, or physicians in "other professional activities". The AMA has a total of 214,053 members.³

It is routine to say that for each physician there are 12 or 14 other health workers. This ratio may be obtained by multiplying the total number of about 280,000 practicing physicians by, say, 14, and the product is the total of about four million health workers. There are about 550,000 allied medical personnel who work with physicians and under the direction and supervision of physicians in providing services to patients — just about two allied medical professionals for each practicing physician.

The words medical and health are not synonymous and should not be used interchangeably. More than medical care is needed to assure the state of total physical, mental, and social wellbeing (not merely the absence of disease) which is so often quoted from a World Health Organization document as a definition of health. Medical care is part of health care; allied medical personnel are part of the total allied health personnel. Physicians, other independent practitioners, and allied medical professionals provide medical and allied services. It is my personal opinion and wish that organized nursing as well as nurses would make themselves formally and publicly a part of health related groups. The health professions are allied to each other; we are dependent on each other. I wish nurses would say that a nurse provides nursing services to patients, usually under the direction and supervision of a physician. And I wish nursing would take pride in nurses who become Medical Assistants or Physician's Assistants. But of that, more later.

A quarter century ago the voluntary health agency was the health and medical research agency of America. The people of America donated their dimes and dollars for medical research

funded by the national voluntary health agencies. There were no National Institutes of Health, and the federal government allocated only a few millions of dollars for medical research. During the last two decades we — the people of America — have increased our contributions to the voluntary health organizations, but we have multiplied our allocations of tax monies to medical research. You can get some idea of how rapidly we have multiplied federal support for medical research from the facts that ten years ago, in fiscal 1960, the U. S. Congress appropriated just \$430 million for health research; for fiscal 1970, the appropriations total \$1,788,300,000.

In fiscal year 1970, a total of about \$67 billion was spent for health. About \$27 billion of this was spent by voluntary health agencies and the government: \$2,221,000,000 (8.2 per cent of the \$27 billion) by voluntary health agencies, and almost \$25 billion (91.8 per cent) by federal, state, and local government.

In my judgment there are larger roles now and in the future for the voluntary health organizations, and the national, state, and local units should play these roles with authority, gusto, and dramatic decisiveness. I would like to emphasize the roles of the voluntary health agencies and the roles of the Registered Nurse as: 1. Innovators in research; 2. Educators in health; 3. Members of the medical care team; and 4. Partners in education for health occupations.

These present and future roles are not original or new; they have been demonstrated, but in the future they need to be played with even more diligence and dedication.

THE ROLE OF THE INNOVATOR IN RESEARCH

Risk money is needed in health and medical research. Not the year-in-and-year-out operating expenses for steady work, but fluid, ready cash which is uncommitted — available for any breakthrough, innovation, or considered risk which offers reasonable promise that the juice is likely to be worth the squeeze. As taxpayers, we are providing the billions of dollars of tax monies needed to support ongoing medical research, and we should continue to support increases in such federal medical research budgets. As contributors to the voluntary health agencies, we should also be supporting risk capital and risk operating expenses for innovative and atypical research proposals and projects, especially for heart, cancer, and safety. The role of the voluntary health agency in the future is one of freedom of choice, the power to move rapidly while maintaining a cost-benefit posture.

On the recommendation of the AMA Council on Voluntary Health Agencies, last December the House of Delegates adopted a formal statement that: "The traditional innovative role in the development of health programs that has characterized the voluntary agency must be preserved. Because of the inherent restrictive factors involved in governmental operations, voluntary health agencies frequently are in a position to function more flexibly in providing service, education and research than are governmental agencies. This is one of the important differences between voluntary and governmental health activities. Voluntarv agencies must maintain their dynamism and continue to develop new ideas, techniques, and concepts."4

THE ROLE OF THE EDUCATOR

For some reason I have remembered the reaction of the Texas health officer who a decade ago said: "Health education! It's a good idea; we ought to try it!" Ail of us have dabbled in education for health. The voluntary health agencies have not devoted their highest salaries nor their largest budgets to education for health, and auditors routinely have the problem of trying to divine the fund-raising and public relations monies which have been buried in the budget as "health education". Registered Nurses know that educating patients is an important part of professional nursing, but educational methods is a course rather than a "major" or "minor" in nursing education.

The 207 million Americans in this country are interested in their health, and they need and welcome education to stay healthy and to restore health. That's why the newspapers make money on a column on health, TV networks make money on medical programs, and bookstores make money selling books on health. A major role of voluntary health organizations now and in the future is leadership in health education. First of all, on research in educational methods: we need to develop a scientific base for educational programs. A \$1,000 can be spent on any one of a dozen kinds of educational activities; which are most productive? How do we learn, and what helps us to make a desirable health practice a habit? Which educational methods are most effective in the work of Registered Nurses? What is our message, and how can we help people to learn it? How can you and I transmute our health knowledge to better

health habits? More questions like these are asked in an article on "The Continuing Education Program of Voluntary Health Agencies" in the official quarterly of the National Society for the Prevention of Blindness.⁵

The significance of all this is that — in this country, at least - health and life itself is now dependent upon personal understanding and action. The communicable diseases are no longer the leading causes of death. The non-communicable diseases and accidents have emerged as the leading causes of death and disability. In the old days community water supplies and sewage disposal systems could help prevent epidemics. Experts could do much of what was needed to be done about communicable diseases. Now the public must be involved in public health: each of us must understand what he must do for his own health and do it. Our personal education on health is our first line of defense against heart disease, cancer, accidents, mental illness, alcoholism, drug addiction, and all the degenerative diseases which have become endemic.

The people of America — 207 million of us — are in need of education for health, and the voluntary health agency is uniquely qualified to budget the risk money to improve our health education techniques. Registered Nurses are the health professionals of choice to reach the people: there are almost 700,000 Registered Nurses currently employed and another 300,000 Registered Nurses not employed in nursing at the moment.⁶ A million Registered Nurses can help to make a significant impact by reaching 207 million Americans. The role of the Registered Nurse as an educator, working in and in cooperation with voluntary health agencies, is one which requires professional preparation, dedication, and diligence.

I might add, in passing, that I am not thinking of the professional nurse as the teacher who does all the talking, with the public as the pupil who does all the listening. One of the basic characteristics of education is that the process requires action by the learner. Education is not something that somebody does to you; it is personal growth and development as the result of personal effort. Therefore, the professional Registered Nurse is a good listener, learns from the public and helps people who teach themselves. The role of the nurse is not to instruct the ignorant; the role of the nurse is to help people to learn more about health and to make a habit of better health practices.

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THE ROLE OF THE HEALTH CARE TEAM

The patient is the reason for our existence, so let us look at medical care from the point of view of the patient. A century or two ago, the patient wanted a doctor to come to the house where the child had the communicable disease. About the middle of the last century it became obvious that the patient was in need of many services which did not require the long and expensive education necessary to prepare a doctor, so the profession of nursing developed. Notice that both the physician and the nurse are concerned with the total care of the patient.

The AMA Committee on Nursing prepared a position statement on "Medicine and Nursing in the 1970's" which was approved by the AMA Board of Trustees and House of Delegates in June 1970. This statement sets forth the American Medical Association's commitment to increasing the significance of nursing as a primary component in the delivery of medical services. The AMA believes that the "delivery of medical care is by its nature a team operation" and that "the professional nurse should share authority with the physician. The nurse contributes to management decisions in patient care, carries out these decisions in the nurses' sphere of competence, takes responsibility and authority for nursing care of the patient, and makes decisions in the nursing aspects of the patient's care within the overall patient-care context agreed upon. The nurse, therefore, can take a logical place at the physician's side when associated with him in patientcare responsibilities."6

Early in this century x-ray and laboratory tests were developed. The obvious question was asked: "Couldn't we have someone whose education and experience are concentrated on shooting x-rays or on doing the laboratory work?" The obvious answer was the allied health worker: a specialist in just one part of the services for patients. By the way, this is why allied health workers can contribute to *better* patient care; physicians are the first to say that there are certain things which can be done best by qualified allied health professionals.

So allied health workers are specialists in just one aspect of patient care. This is why the Physician's Assistant was something new to allied health: like: the physician and the nurse, the Physician's Assistant is concerned with the total patient. Another allied medical occupation which should be mentioned in this context is the Medical

Assistant — the largest of the allied health occupations. Physicians who practice medicine hire the best people they can get for the salary offered to work in the office-clinic as Medical Assistants, doing as much as they are capable of doing to assist the doctor in servicing patients. As a husband and father, I appreciate it very much when the people working with our doctor in the officeclinic are well educated in health and medicallyrelated subjects. The best education for someone to assist the physician in medical care is nursing. I think it is excellent when a nurse becomes a Medical Assistant or Physician's Assistant. The patient gets better care, and more of it! I like the statement in a report from the National Commission for the Study of Nursing and Nursing Education⁷ that "the nurse has historically been the physician's first assistant since 1900".

The patient needs health professionals who are working together in providing medical services. That means the students must be taught how to cooperate with other health professionals, how to serve as the "captain" of the health team when their particular service is what the patient needs, and how to continue their education for teamwork as a lifetime continuum. What the patient does *not* need is a growing number of independent health professionals working separately.

The education of a health professional continues throughout his or her working life; and the health professionals who work together should learn together. The role of the voluntary health agencies is to make their contributions to continuing education a cooperative activity involving related occupations. The voluntary health agencies thereby enhance the role of the medical care team. The Registered Nurse should be one of the strongest and most cooperative members of the medical care team.

The AMA Council on Voluntary Health Agencies has a Committee on Continuing Professional Education Programs of Voluntary Health Agencies "to study, advise, coordinate, and offer consultation on continuing education programs of voluntary health agencies offered to the practicing physician." On recommendation of the AMA Council on Voluntary Health Agencies, the House of Delegates adopted a statement that: "Many agencies of federal, state, and local government now promote and support programs which are closely allied to programs traditionally conducted by voluntary health agencies. If the independence

(Continued on Page 18)

Delivery of Ambulatory Care

Author Views Nation's Health Care Problems And Offers Some Solutions

By Charles E. Millard, M.D.

The Delivery of Ambulatory Medical Care has assumed growing importance in recent years because of the inexorable increase in the cost of health care and the inequities of the distribution of this care. These are real problems to which solutions should be sought.

Three main possibilities are being considered at the present time: Government sponsored national health insurance; hospital ambulatory medical care centers; and the current system of private practice with modifications. It is our theory that the latter is the best approach and the most economical method.

How can rising costs best be approached? The Department of Health, Education and Welfare indicates that the doctor's share of the medical care dollar has decreased from 1950 to 1969. In 1950 the physician's share was 23.08 per cent while in 1969 it dropped to 21.11 per cent, or in other words, one-fifth of the health care dollar

CHARLES E. MILLARD, M.D., of Bristol, Rhode Island, founder and President of the Medical Associates of Bristol County, Bristol County Medical Center.

Presented at the Conference on the Current Status of Ambulatory Care in Rhode Island, sponsored by the Rhode Island Health Services Research, Inc. at the Rhode Island Medical Society Auditorium, Providence, Rhode Island, on Sept. 27, 1971.

is paid to the physician while the other 80 per cent is directed to nursing homes, hospitals, dentists, and other medical and health care needs. (See Table I)

Many advocates of decreasing medical costs are proposing fixing physician's fees either by a prepaid capitation plan or by an outright legal enactment. Elliot Richardson, Secretary of Health, Education and Welfare, has asked for authority to limit increases in physician fees under the medical program while our state government has done similarly in its aid program.

This approach is basically wrong for several reasons. It will lead to decreased production on the part of physicians who unfortunately have the same human frailities as other members of our society and who would do only that amount of work necessary to preserve their status. We currently see this principle at work in our service hospitals, veterans administration hospitals, and other salaried facilities. Some may challenge this concept however, James V. Maloney, Jr. has published a scientific study in which he concluded "Without an economic incentive clinical faculities of medical schools will not accept personal involvement in the care of the sick if they have any reasonable alternative which permits them to maintain their self-respect."

(Continued on Next Page)

Table I

Calendar		Hospital	Physician	Drugs &	All
year	Total	care	service	sundries	other
1950	\$11.7	\$ 3.8	\$ 2.7	\$ 1.7	\$ 3.5
1955	16.9	5.8	3.7	2.4	5.0
1960	25.3	9.0	5.7	3.7	6.9
1961	26.9	9.9	5.9	3.8	7.3
1962	29.0	10.6	6.5	4.1	7.8
1963	31.0	11.6	6.9	4.2	8.3
1964	34.5	12.6	8.1	4.4	9.4
1965	37.2	13.5	8.7	4.8	10.2
1966	41.6	15.5	9.2	5.3	11.5
1968	52.5	20.8	11.2	6.1	14.4
1969	58.9	23.9	12.5	6.6	15.9

Table II

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Type	10	Lxp	end	ıt	ure

	~ *		
			Over-
Program	Total	Product	head
Total reimbursement program	882.0	441.0	441.0
Medicare, Part A	482.2	241.0	241.1
Medicaid, institutional	154.2	77.1	76.7
Medicaid, ambulatory	206.0	103.0	103.0
Federal Employees Health			
Benefit programs	18.0	9.0	9.0
CHAMPUS, institutional		6.5	6.5
CHAMPUS, ambulatory		1.8	1.8
OEO vendor program		1.2	1.2
VA Hometown Pharmacy		.7	.7
Public Health Service	1.2	.6	.6

Space precludes an extensive discussion of national health insurance plans, but it is hard to believe that the Federal Government has the answer or the capability of providing health care to 200,000,000 people very efficiently when evidence surrounds us that massive government programs can fail human needs. Decades of government experience in multibillion dollar housing, welfare, and poverty programs not only have failed to resolve these basic problems, but they often have made them worse.

Under the federal Medicare plan, established to care for our senior citizens in the sunset of life, the government has increased the monthly premium and deductible under Part "A" of the program (hospital etc.) and it is considering an increase in the deductible under Part "B" (physician's services). This federal action has necessitated Blue Cross and other carriers of supplemental plans which cover the difference between Medicare and the hospital and physician's charges to increase their fees. The elderly already, burdened by the high cost of living and meager retirement checks, have therefore less money to spend on food, clothing, rent, and other items for living. Welfare programs are in an admitted state of chaos at this time.

THE GOVERNMENT RECORD

Al Smith was noted for his famous statement,

"Let's look at the record." In the following paragraphs we shall heed Mr. Smith's wise counsel. (See Table II).

The drug program administered under the various federal auspicies cost \$825,000,000. In every program no matter what it cost to purchase the drugs, the same cost was necessary for the administration overhead; in other words, there is no possible way to reduce the cost of anything when the administration overhead is equal to the cost of the product.

The health programs of the federal government are so hopelessly fragmented and uncoordinated that the resulting gaps in duplications are intolerable even to those who espouse government control of medicine.

Senator Abraham A. Ribicoff of Connecticut, chairman of the Senate's Subcommittee on Governmental Operations, has said:

such bureaucratic

There are so many programs administered in such bureaucratic confusion that no one, not the Department of Health, Education, and Welfare, not the Bureau of the Budget, not any of the private organizations was able to tell a committee how many programs there are.2

Ribicoff also points out that all levels of government will this year spend \$31 billion on socaled poverty programs without knowing if these programs have ever removed a single person from poverty. Adds the Senator: "If we eliminated all these programs and divided the \$31 billion among all families who are under the poverty line, each family of four would receive almost \$4,000 which would put them almost \$1,000 over the poverty line."

Another glaring example is the treatment of the American Indian whose entire care, including his health, has been the responsibility of the government for one hundred years. It requires a certain strain on the process of human logic to interpret this performance as other than a totally effective

There is an expression that says "coming events cast their shadows." This is certainly true when tne considers the legislation (Medicare) which governs the medical care of only 10 per cent of the population. When enacted, this bill contained 138 pages and it weighed 46 ounces; today, less than five years later, there are now 37 volumes and it weighs 186 pounds with 8,000 pages, and 800 revisions.

HOSPITALS AND AMBULATORY CARE

Hospitals are the second group that are going to administer ambulatory medical care. According to the American Hospital statisticians, hospital costs will increase 14 per cent in 1971 and about 13 per cent for each year until 1975. The best that most hospital men seem to expect from the 1970's is that the rate of increase will level off to 10 per cent — 12 per cent per year by 1980. The cost in the community hospitals will vary between \$245-275 a day.³

It is hard to understand how, with an inexorable increase in hospital costs, these facilities will be able to render ambulatory care for less cost than the private physicians.

There is much contemporary discussion regarding physicians' fees and how, if they are contained, the cost of medical care can be reduced. If one were to assume, however, that physicians' fees could be reduced by 50 per cent which means that the physician's share of the medical care dollar would be reduced to 10 per cent, there is no way of reducing the cost of medical care over the next ten years because yearly rising costs of hospitalization would nullify this decrease.

THE VIEW OF THE BRISTOL COUNTY MEDICAL ASSOCIATES

We believe that every American should receive the care which he needs and deserves. It has been our aim to try various innovative procedures to accomplish this goal in our community. We believe that the cost and delivery of medical care is a problem which must be solved but we would not be so parochial to say that group practice is the solution.

Dr. Ernest W. Saward, former Director of the Kaiser Permante Clinic, Portland, Oregon, said that "no single delivery system will suffice for a nation as diverse as ours." We believe in the freedom of choice of physicians as a basic necessity for the success of any plan and we believe that participation by the government in medical care should be as limited as possible; however, there is a place for government, medical men, and others to work together to solve the very real health problems that exist in society.

HEALTH CARE PROBLEMS AND SOLUTIONS

Some of the major health care problems facing the nation and some personal suggestions to remedy them include:

1. Long term, crippling, and disabling diseases which impose intolerable expenses on a family

should be covered by catastrophic insurance policies purchased by the government.

- 2. People earning under \$6,000 (families) should be covered by Blue Cross and Blue Shield plan "B" paid in part by the employer and the government.
- 3. When people go from a working to a non-working status, the government should pay for the premium of their plan "B" Blue Cross and Blue Shield.

The use of Blue Cross and Blue Shield is suggested since both plans have established mechanisms to administer such programs and the use of existing plans would avoid needless waste, expense, and inefficiency that a new bureaucracy would create. Further, money would be saved because many programs such as Aid to Dependent Children, Medicaid, and others would be abolished. Thus money would be saved not only on these programs but also their administrative overhead.

TAX INCENTIVES

- 4. To attract physicians to locate in the ghettos and rural areas, a tax incentive or other inducement might be offered such as the first year no tax on the first \$25,000; second year, \$20,000; third, \$15,000; fourth, \$10,000; fifth, \$5,000. If a doctor signed up for another five years the tax incentive could be repeated. Anyone who spends ten years in an area probably would remain because he would be deeply committed. Another financial lure could be low interest, long term loans which should be granted to these individuals to build clinics, small hospitals and other facilities at 40 years at a 1 per cent interest. There is a precedent for this combat pay in infantry, people employed in dangerous jobs, and oil well fighting.
- 5. To supply medical services to rural area groups of physicians could be located in central areas and physician's assistants could be used to visit outlying and isolated settlements and individuals. Problems that required more definitive and extensive treatment could be handled by employing helicopters to transport the sick or accident victims. This concept provides rapid and broad service to areas -that otherwise would not be able to be covered medically.

The current large manpower reserve could be utilized in our returning veterans to form a helicopter service under government sponsorship to operate from these rural areas. Medics could be trained in MEDEX schools and they become phy-

(Concluded on Page 23)

Surgicenters

Independent Facility Provides Safe And Economical Environment For Surgery Of Limited Scope

By Charles L. Hill, M.D.

The problems of limited numbers of hospital beds and increasing health care costs continue to be serious. The physician of today must be concerned both with the costs of the care he provides and with its quality. The responsibility for providing quality care at the lowest possible cost must be faced. A group of practitioners in Providence, Rhode Island and another in Phoenix, Arizona have independently endeavored to provide a unique relatively inexpensive facility for certain types of elective surgical patients requiring procedures of limited scope.

PROVIDENCE FACILITY

Designed to meet all criteria for electrical con-

CHARLES L. HILL, M.D., Surgeon, Dept. of Otolaryngology, Rhode Island Hospital, Memorial Hospital, Pawtucket; Consultant, Providence Lying-In, Butler Hospital.

ductivity, sterility, humidification, and operability required by the City of Providence, the United States Public Health Service, and the National Fire Protective Association is an operating room privately financed and located outside of hospital premises. The operating room has been staffed by a registered nurse and a practical nurse. There is a recovery room for four patients contiguous with the operating room and having suction and oxygen available. The sophisticated structure, facility, and equipment necessary for those procedures which should not be done in an office but also do not require the postrecovery facilities of a hospital have been provided to the community at no cost to the citizens for construction. Any practitioner on the staff of an accredited hospital is free to use the operating room for those procedures for which he has hospital privileges.

The response nationally has been enthusiastic,



with recognition from Senator Claiborne Pell and particularly from the American Medical Association, which is presently drawing up standards for registration of similar facilities. Locally, the Providence City Council has endorsed the Surgicenter. Consumer groups have endorsed the concept, as have several local medical and osteopathic societies. Complete acceptance has been delayed by the refusal of the Rhode Island Blue Cross and Blue Shield plans to accept the charges for reimbursement. The Rhode Island Health Planning Council has on two occasions expressed reservations about such a facility.

PHOENIX FACILITY

In Phoenix. Arizona, Doctors Wallace Reed and John Ford have opened a similar establishment. Both are anesthesiologists. Feeling that the medical profession has a responsibility to offer an alternative to the existing hospital facilities, they have made available to the community four operating rooms and a recovery room. They have received enthusiastic support, and complete cover-

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age has been provided by Arizona Blue Cross. They are servicing three hundred cases a month and are adding three more operating rooms. Improvement in utilization experience at local hospitals has resulted, and also a reduction of some hospital charges. Blue Cross has realized savings approaching 75 per cent as compared to comparable charges in hospitals.

PROCEDURE

A practitioner schedules a case with the facility. Appropriate laboratory studies are obtained, and, if general anesthesia is requested, a history and physical examination are completed by one of the physicians. The patient is kept in the recovery room until released to his home by the anesthesiologist. The average in-and-out times has been three hours. There have been no untoward emergencies in five thousand cases.

The growth in Providence, although slow, is encouraging. The charges have been reimbursed by all private insurance companies thus far involved and have been paid by Connecticut and Massachusetts Blue Cross. Recently, CHAMPUS (Military Dependants' Medical Care Insurance) has recognized the facility for payment. Among the advantages are certainly of scheduling, as there are no emergency cases; familiarity of operating personnel with the procedures; and appreciation by the patient for being able to avoid hospital admission with its attendant psychological effects. The limited size of the operation facilitates change of procedure without red tape, as well as maintaining quality control, expansion of service to evenings and weekends, and utilization of parttime personnel in the community. The concept is gaining increasing recognition among health care groups and the concept will, we believe, prove its value to the community.

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Editorials

UNIFORM ALCOHOL ACT

HEW Secretary Elliott Richardson has endorsed the "Uniform Alcoholism and Intoxication Treatment Act" recently developed by the National Conference of Commissioners on Uniform State Laws, and recommended that the Uniform Act be passed by all States.

The Act would make it state policy that alcoholics and intoxicated persons may not be subjected to criminal prosecution because of their consumption of alcoholic beverages, but instead would be provided appropriate treatment for their alcohol problems.

Secretary Richardson stated: "This prototype legislation is evidence of a breakthrough in the nation's recognition of alcoholism and public intoxication as health issues, not criminal behavior. I strongly recommend that the legislature of each state adopt this uniform law at the earliest possible time."

In most states, including Rhode Island, public intoxication is a crime, one which nationally accounts for one-third of all arrests and one-half of all persons in jail each year. As pointed out by Richardson, the ineffectiveness of the current laws has been demonstrated by the high rates of recidivism.

The Uniform Alcoholism and Intoxication Treatment Act stipulates that a Division of Alcoholism be established within the state health or mental health department. Rhode Island already has such a department. Under the Act individuals would receive necessary emergency medical treatment and followup care involving medical, psychological, and social services, rather than be detained on criminal charges.

Secretary Richardson has sent letters to the governors of all states urging them to ask their

state legislatures to adopt the Uniform Act. This was accompanied by a pledge from the Department of HEW of technical assistance and consultation as needed by the states. Enactment of the Uniform Alcoholism and Intoxication Treatment Act by a state would not change the state's existing laws pertaining to driving under the influence of alcohol.

Under the law civic commitment of alcoholics would be permissible in only a limited number of cases and only as a last resort in emergency situations. Grounds for involuntary commitment would be very limited, and strict procedural safeguards would be provided.

Several states and the District of Columbia have made significant changes in recent years in their legal codes with respect to alcoholism and public intoxication similar to those proposed in the Uniform Act. Among such states are Maryland, Minnesota, Florida, Hawaii, and most recently Massachusetts. The Massachusetts law is accompanied by a program which provides 55 hospital beds for alcoholics in 1972; 188 for the following year, and 500 in 1974. The program also is generously funded — beginning with one million dollars and then rising to nine million when the program is fully underway.

The allocation of beds in hospitals or clinics is an essential part of the program, as are rehabilitation-psychological services, and vocational training. The present Division of Alcoholism of the Rhode Island Department of Mental Health, Retardation and Hospitals would be a logical nucleus for expanding these services.

We trust that such legislation will be introduced in the 1972 Rhode Island General Assembly and strongly support its adoption.

BLUE SHIELD-BLUE CROSS LOSS OF EMPLOYMENT PREMIUM WAIVER

At the Rhode Island Blue Shield Professional Relations Conference held the past Fall at Newport Albert B. West, Director of Business Regulation, pointed to the problem of loss of Blue Cross and Blue Shield by employed subscribers when they are discharged from employment or furloughed. Several members of the Rhode Island Medical Society have also expressed concern over the problem of loss of coverage by subscribers.

With comprehensive coverage now available, a desirable advance would be protection against sudden discontinuance of coverage.

Most life insurance and health and accident policies for a small premium increment grant Waiver of Premium. Also, cash payments are provided for unemployed and sick individuals through Unemployment Compensation and in Rhode Island Cash Sickness Temporary Disability insurance.

Generally speaking Blue Cross and Blue Shield coverage is continued upon loss of employment for one to three months depending upon the premium payment interval. It is not uncommon for someone employed in a business where the premium based on experience rating is low to be faced with the highest cost coverage under direct payment. Provision for extension of six to twelve months would be desirable.

Extended coverage as a supplement to comprehensive coverage should be explored The premium

for this coverage, it seems, would be based actuarily on the cost of insuring for the premium rather than for the full cost of coverage.

If Blue Cross and Blue Shield can work this out actuarily, it could be thrown into the hopper as an additional bargaining chip for unions and also be made available in some form to those on direct pay or to others who may wish to purchase it as a personal supplement. Its availability should be publicized as much as possible.

* * *

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MEDICAL BUREAU of the Providence Medical Association

THE VOLUNTEER HEALTH AGENCIES ROLE TODAY AND TOMORROW

(Continued from Page 10)

and freedom of action of voluntary health agencies is to be maintained, the relationships between these agencies and government programs musst receive continuing review and evaluation."

PARTNERS IN EDUCATION FOR HEALTH OCCUPATIONS

The voluntary health agencies can do much to improve education for health occupations, and Registered Nurses can play a major role in this by cooperating as helpful members of medical care teams.

Voluntary health agencies and nurses find the AMA a willing and cooperative partner in education for health occupations.

Staff activities for health professions and services are provided by several divisions and departments of the American Medical Association.

Recruitment to health careers is a program of the AMA Department of Special Projects. In addition to other activities, this department prepares successive editions of Horizons Unlimited, a paperback book describing rewarding career opportunities in medicine and allied fields. In the preamble, "A Message to Students", AMA Executive Vice President E. B. Howard, M.D., set the keynote: "The two fields - medicine and careers allied to it — are inseparable. They are equal partners working together . . . " The recruitment book is approaching a total of a million copies. The AMA provides a sound, color motion picture, also titled Horizons Unlimited, for health careers recruitment. A new motion picture titled A MAT-TER OF OPPORTUNITY is available from the AMA to encourage blacks and other minority groups to consider a medical education and career. The Department of Program Services also prepares kits of materials for an annual community health week. Staff services are provided to the AMA Woman's Auxiliary, which works through health careers committees of state and county auxiliaries to recruit students to educational programs for health careers; for example, in 1970 the Woman's Auxiliary provided \$135,000 in scholarships to allied health students.

Practice (professions) for allied health workers is a special interest of the AMA Division of Medical Practice, which has a Department of Health Manpower which staffs the Committee on Nursing

and the Council on Health Manptwer. They are concerned with the roles of the members of the medical care team, registries and licensure, and the tasks involved in the emergence of new allied health occupations.

AMA Guidelines for the Development of a New Health Occupation as adopted by the AMA House fo Delegates in December, 1969, are available for distribution.

The AMA Division of Medical Practice also has a Department of Community Health, which staffs the Commission on Emergency Medical Services—the only Commission in the AMA. This Commission is charged to "identify and coordinate the implementation of programs with the specialty medical societies as they relate to professional education and educational standards and training programs for allied emergency personnel". The Commission is preparing a publication titled "Emergency Medical Service Technician—Guide for Program Planning", prepared in cooperation with the American Association of Junior Colleges.

Legal liability is a subject of growing concern in allied health, and the AMA Office of the General Counsel provides its consultation and guidance in response to requests for opinions, papers and analysis. Some of these are published in Jama and other medical journals. Miss Betty Jane Anderson, J.D., is the legal assistant for health service law in the Office of the General Counsel, handling injuiries on licensure, certification, and legal liability involving health personnel.

Information on allied health professions and services is provided to the medical profession and the public by the AMA Division of Scientific Publications in periodicals such as the Journal of the American Medical Association and by the Communications Division in the American Medical News and releases to newspapers.

Education is the special concern of the AMA Division of Medical Education, which includes the Department of Allied Medical Professions and Services.

The American Medical Association has always had a major interest in education. A century and a half ago, when the United States was an agrarian country with a frontier, there were no national standards for the education of physicians, and some of the medical schools were just proprietary diploma mills. The New York Medical Society adopted a statement which began: "It is believed

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THE VOLUNTEER HEALTH AGENCIES ROLE TODAY AND **TOMORROW**

(Continued from Page 18)

that a national convention would be conducive to the elevation of the standard of medical education in the United States"10 and invited medical leaders to a meeting to organize a national association of physicians.

The organizational meeting was held, appropriately, in Philadelphia in 1847. After arranging for a constitution and by-laws, the first action of the newly-organized American Medical Association was the appointment of a Committee on Medical Education.¹⁰ This became a Council on Medical Education in 1904. There were many substandard medical schools. It was the Council on Medical Education of the American Medical Association which asked the Carnegie Foundation for the Advancement of Teaching to review medical education. The two-year study was begun in 1908 by Dr. Abraham Flexner of the Carnegie Foundation. On site visits he was accompanied by Dr. N. P. Colwell, then Secretary of the AMA Council on Medical Education. The Flexner Report¹¹ was well received, with the result that the 160 schools in 1905 were reduced by consolidation and closures to 95 in 1915, and 80 by 1927.

The Council on Medical Education of the AMA and the American Association of Medical Colleges now co-sponsor the Liaison Committee on Medical Education and accredit medical schools. The Council on Medical Education also approves internships and residencies; since 1927 the Council has published its annual DIRECTORY OF AP-PROVED INTERNSHIPS AND RESIDENCIES. 12

In 1933 the American Occupational Therapy Association asked the AMA Council (then named the Council on Medical Education and Hospitals) to cooperate on the development of standards and the approval of educational programs for occupational therapists. The minimal requirements essential for AMA approval for educational programs for occupational therapists were adopted by the AMA House of Delegates in 1935. At the request of the American Physical Therapy Association, Essentials for the education of physical therapists were adopted by the AMA House of Delegates in 1936. Essentials for medical technologists were also adopted by the AMA in 1936, and since then the Essentials (basic requirements of educational programs for approval by thee Council on Medical

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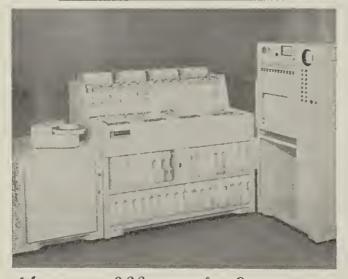
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Education of the AMA and the collaborating organizations) for a dozen additional allied medical occupations have been adopted by the AMA House of Delegates. The years Essentials were first adopted by the AMA are: 1935 - Occupational Therapist; 1936 — Physical Therapist; 1936 — Medical Technologist; 1943 — Medical Record Librarian 1944 - X-Ray Technician (now Radiologic Technologist); 1953 — Medical Record Technician; 1962 — Cytotechnologist; 1962 — Inhalation Therapy Technician; 1967 — Certified Laboratory Assistant; 1968 — Radiation Therapy Technologist; 1969 — Medical Assistant; 1969 — Nuclear Medicine Technician; 1969 — Nuclear Medicine Technologist; 1969 — Orthopaedic Assistant; and 1970 — Histologic Technician.

Additional Essentials are expected to be submitted to the AMA House of Delegates for the: Assistant to the Primary Care Physician; Blood Bank Specialist; Medical Laboratory Technician; and Urologic Physician's Assistant.

Essentials are also being drafted for the: Biomedical Instrument Technician; Electroencephalographic Technologist; Inhalation Therapist; Medical Emergency Technician; and Operating Room Technician.

The Council on Medical Education of the American Medical Association collaborates with: American Academy of Orthopaedic Surgeons; American Association for Inhalation Therapy; American Association of Medical Assistants; American College of Chest Physicians; American College of Radiology; American Medical Record Association; American Occupational Therapy Association; American Physical Therapy Association; American Society of Anesthesiologists; American Society of Clinical Pathologists; American Society of Medical Technologists; American Society of Radiologic Technologists; Society of Nuclear Medical Technologists; and Society of Nuclear Medicine.

Additional organizations currently considering collaborating with the AMA Council on Medical Education include: American Academy of Family Physicians; American Academy of Neurology; American Academy of Pediatrics; American Association of Blood Banks; American Association of Clinical Chemists; American College of Physicians; American College of Surgeons; American Electroencephalographic Society; American Medical Technologists; American Society for Microbiology; American Society of Cytology; American Society of Electroencephalographic Technologists;

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THE VOLUNTEER HEALTH AGENCIES ROLE TODAY AND TOMORROW

(Continued From Page 20)

American Society of Internal Medicine; and American Urological Association,

The Council on Medical Education has an Advisory Committee on Education for the Allied Health Professions and Services, with a Panel of Consultants composed of one representative of each of the collaborating organizations. The panel provides the Advisory Committee and the Council with a broad base of information and a two-way channel of communication. The Council on Medical Education's Advisory Committee on Education for the Allied Health Professions and Services and Panel of Consultants has task forces which: 1. Gather information on current activities; 2. Discuss actions which could be taken by the AMA Council on Medical Education and collaborating organizations; 3. Identify alternatives and possibly suggest priorities, and 4. Draft recommendations which the Advisory Committee could make to the Council on Medical Education.

Edmund D. Pellegrino, M.D., Chairman of the Council on Medical Education's Advisory Committee, appointed the following task forces: Task Force on Core Courses and Career Mobility; Task Force on Equivalency and Proficiency Examinations; Task Force on Fees for Accreditation Services; Task Force on Institutional Approach to Program Evaluation; Task Force on Instructor Preparation; Task Force on Legislation; Task Force on Military Allied Medical Education; and Task Force on Terminology.

As of the summer of 1971, the AMA Council on Medical Education and the 14 collaborating organizations had approved a total of 2,519 allied medical educational programs:

- 212 Certified Laboratory Assistant
- 117 Cytotechnologist
- 82 Inhalation Therapy Technician
- 12 Medical Assistant
- 25 Medical Record Librarian
- 29 Medical Record Technician
- 773 Medical Technologist
- 17 Nuclear Medicine Technologist or Technician
- 36 Occupational Therapist
- 4 Orthopaedic Physician's Assistant
- 50 Physical Therapist
- 16 Radiation Therapy Technician
- 1146 Radiologic Technologist

2519 Total educational programs approved.

July 1, 1971

(Continued on Next Page)

JANUARY, 1972

ARGUMENTUM AD HOMINEM

Despite the multiplicity of specialty group insurance plans from which you may choose,

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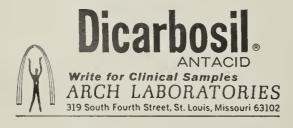
We were very pleased to see an editorial on "Accreditation For Allied Medical Groups" in the Rhode Island Medical Society said that "It is an encouraging development that organized medicine is becoming involved in accreditation of allied medical education programs." 13

The basic objective is to provide more and better service to patients. The patient is the reason for the existence of health professionals. Allied medical education prepares students to serve patients. That is why the AMA is involved.

Obviously the work of the AMA Council on Medical Education is seen as a service to all concerned with allied medical education. This service is provided by the AMA as a participant — a working partner with other national professional organizations concerned and involved. The national health and medical organizations work in partnership with the national organizations which represent education and educators.



"My secret?
For heartburn I always
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The AMA Council on Medical Education and its Advisory Committee on Education for the Allied Health Professions and Services, the Council on Voluntary Health Agencies, the Council on Health Manpower, and the Committee on Nursing are all interested in increasingly close cooperation with the national voluntary health agencies and organized nursing. Our role is one of self-coordination and cooperation. To the extent that we all play it well we will be increasingly helpful to the people, especially to those who are patients.

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2 2

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DELIVERY OF AMBULATORY CARE

(Concluded From Page 13)

sician's assistants. This program would help to reduce the rolls of the unemployed and it would take advantage of all the money spent training the men.

6. The government should underwrite programs such as MEDEX and other allied health schools. Dean Lewis Thomas of New York School of Medicine says that we cannot provide the necessary care through present procedures, and "if we will not have enough doctors and cannot train enough of them, the only alternative will be to supplement the physicians' efforts with personnel requiring less training."

Finally, it is unrealistic to think that the medical profession can be enrolled in a system that will lower its income; however, if physicians wish to maintain a high income it must be earned, not only by personal service on a one-to-one basis, but also by leadership.

My record will prove that I am a Democrat and a pro-labor physician. A long admirer of the Nation's labor leaders who have made socio-economic gains for the working man. I feel special admiration for Mr. George Meany, the venerable leader of the AFL-CIO. In discussing the wage and price freeze on September 5, 1971, Mr. Meany said "labor and management participation would have to be voluntary because Government compulsion would put the nation on the road to Fascism." It is uncongruous then for labor leaders to advocate compulsory national health insurance — for, if the shoe on the foot of Labor puts the Nation on the road to Fascism, I assure you, the shoe placed on the foot of Medicine leads down the same path.

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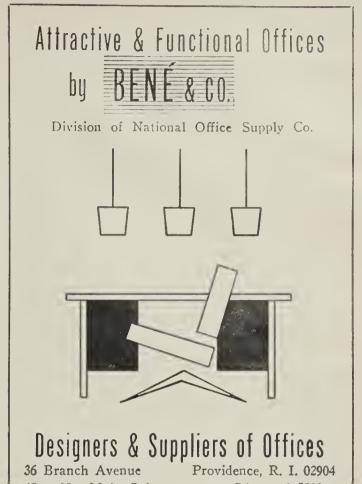
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DERMAQUIZ ANSWER

(See Page 17)

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NECROLOGY — 1971

(Concluded From Page 5)

staff president of Roger Williams General Hospital.

Born in Babylon, New York, he was graduated from Cornell University and New York Medical College and Flower Hospital in 1905 and 1907.

He was a past president of the Rhode Island Homeopathic Medical Society, and was a member of the American Institute of Homeopathy, the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

He has been chief of the ophthalmic department of the Homeopathic Hospital of Rhode Island before it became Roger Williams General Hospital. The Muncy Eye Clinic at Roger Williams is named for him.

In 1939, he received national attention for his experiments in the use of vitamins in the treatment of eye problems. He was the author of many papers in professional journals.

Doctor Muncy was a life member of the Providence Art Club, which he joined in 1923.

A past president of the Rhode Island Sons of the American Revolution, he held the office of poet on the organization's board of directors. He was also a member of the Rhode Island Historical Society.

He was also a member of the American Academy of Ophthalmology and Otolaryngology, and a fellow of the American College of Surgeons and the Pan-American Ophthalmological Congress. He was a past president of the American Ophthalmological, Otological and Laryngological Society and an honorary member of the Ophthalmological Society of Mexico.

A A A

WILLIAM H. ROBERTS, M.D.

William H. Roberts, M.D., a retired physician, died December 18, 1971, after an eight-year illness. He was 88 years old.

Born in Collinsville, Connecticut, he was graduated from Brown University in 1906 and Columbia College of Physicians and Surgeons in 1908. He was a staff member and later a consulting member of Rhode Island Hospital and the Charles V. Chapin Hospital in Providence.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

DANIEL A. SMITH, JR., M.D.

Daniel A. Smith, Jr., M.D., a retired physician

in Newport, died June 22, 1971 at the age of 90.

Born in Newport, he was graduated from the Massachusetts Institute of Technology in 1903. He was also graduated from the University of Pennsylvania Medical College in 1912.

He had been in practice in Wilmington, Delaware, until he came to Newport to practice in 1931.

He was a member of the Newport County Medical Society and the Rhode Island Medical Society.

A A A

F HAROLD W. WILLIAMS, M.D.

Harold W. Williams, M.D., a Providence neuropsychiatrist died November 11, 1971. He was 67 years old.

Born in Schenectady, New York, he was graduated from Syracuse University and the Syracuse University Medical School in 1929.

He was active on state medical society committees, heading the committee on Mental Health for many years, and he served on the State Council of Mental Health the Governor's Advisory Council to the State Medical Center and the state Advisory Committee on Aging.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, the American Psychiatric Association, the American Neurological Association, the Association for Research of Nervous and Mental Diseases, the American Association for Neuropathologists, the Mental Health Association, and the Governor's Council on Mental Health.

A A A

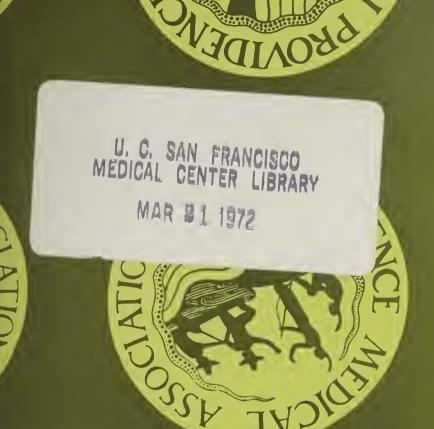
HERMAN A. WINKLER, M.D.

Herman A. Winkler, M.D., a retired Providence physician, died November 27, 1971. He was 75 years old.

Born in New York, he was graduated from Brown University in 1918 and Harvard Medical School in 1922.

He interned at St. Francis Hospital in New Haven and at the Massachusetts General Hospital. Doctor Winkler was on the staff and served as senior surgeon at Rhode Island Hospital, the Memorial Hospital, Pawtucket, and Charles V. Chapin Hospital.

He was a member of the Providence Medical Association, the Rhode Island Medical Society and the American Medical Association. He was also a member of the New England Otolarynogology Society, the Rhode Island Otolaryngology, and a fellow of the American Academy of Otolarynogogy.















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When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect, discontinuethe drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first

who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the

human dose have been negative.

Usage In Children Not recommended for use in children under

12 years of age.

Precautions In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to intro-duce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or over-stimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. Cardiovascular: tachycardia, palpitation, elevation of blood pressure. Gastrointestinal: nausea and vomiting, diar-rhea, unpleasant taste, constipation. Endocrine: changes in libido, impotence. Autonomic: dryness of mouth, sweating, mydriasis. Allergic: urticaria. Genitourinary: diuresis and, rarely, difficulty in initiating micturition. Others: Paresthesias, sural spasms.

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The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

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Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestalucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-recentor.

marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

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Rhode Island Medical Journal

FEBRUARY, 1972

VOLUME 55, No. 2

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COVER: Seal of the Providence Medical Association which held its 125th Annual Meeting January 5th.

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House of Delegates of the American Medical Association

Report Of Clinical Session, New Orleans, Held November 28-December 1, 1971

By Edmund T. Hackman, M.D., Delegate, and Seebert J. Goldowsky, M.D., Alternate Delegate from Rhode Island.

Actions which were not only significant, but historical, were taken by the House of Delegates at the Clinical Convention. They included creation of a special section for medical students, and one for interns and residents; ordering open hearings at the two 1972 conventions to explore questions relating to AMA organizational structure and programs, questions raised by AMA President Wesley W. Hall last June in Atlantic City and again in New Orleans; approving a vote on the Board of Trustees for the AMA vice president; approving participation of non-members of the AMA in AMA scientific programs, and directing that the AMA lead in developing a national program for certification of the assistant to the primary care physician.

MEDICAL STUDENTS

No less than five items of business — Report I of the Board of Trustees and four resolutions — concerned this subject, reflecting the intensity of interest. These items were studied by a reference committee and a substitute resolution was offered in lieu of all of them — referring the matter to the Board for study of mechanisms to include students in the organizational structure.

But the House rejected the move. It adopted instead an amended resolution on motion of the California delegation. This measure approved

"creation of a special section for medical students and a section for interns and residents." It directed that the Council on Constitution and By-Laws "develop appropriate language to accomplish this purpose," working with representatives of the Student American Medical Association and representatives of the interns and residents. The long-heard appeal of students and younger physicians for a voting voice in the AMA was thus answered.

PRESIDENT'S ADDRESS

AMA President Wesley W. Hall, saying, "our House of Medicine is sorely in need of some major repairs," repeated his call for a Constitutional Convention, or other appropriate procedure, for a basic review of organizational structure and programs. He first suggested such a convention upon his inauguration last June.

Doctor Hall said that since that time he had traveled throughout the nation and heard from physicians "hundreds of unsolicited views on medicine in general, on problems they are encountering in their practice and on our stewardship of the AMA.

"Frankly, I am troubled and disturbed by what I see and hear," Doctor Hall told the House, "and I am more convinced than ever that we need

(Continued on Page 29)

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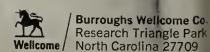
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REPORT OF AMA HOUSE OF DELEGATES

(Continued from Page 27)

a basic review of our Association's organizational structure."

He did not envision "a study that will continue over a period of years and vears and become bogged down in trying to anticipate problems and programs of the distant future. We all recognize the need for long-range planning, but my concern calls for more immediate action."

Doctor Hall said he was disturbed by a number of things, including losses in membership, association finances and a decrease in attendance at annual and clinical meetings.

He also said, "We simply have too many programs. Some have outlived their usefulness. Others are of considerable value in these times. Still others should be pruned."

He called for employment of the consulting firm of Cresap, McCormick & Paget, which did a study for the AMA in 1968, to do another survey on AMA operations.

The president also called for closer liaison with specialty societies; suggested the AMA should sponsor only national and international congresses on general subjects, rather than its traditional meetings, and said it may be time to consider reorganizing the association as a "for profit" corporation or service corporation.

Doctor Hall's address and Resolution 50 which also called for organizational review, were studied and discussed in reference committee. The committee also studied two reports dealing with the question of a Constitutional Convention, from the Councils on Constitution and Bylaws, and Long Range Planning and Development, both of which recommended against holding a Constitutional Convention.

The reference committee "reapprised itself of the 1968 management report" of Cresap, McCormick & Paget. Upon completion of Phase I of that study, "the Board of Trustees, of which Doctor Hall was a member, terminated the study and the action was approved by the House of Delegates in December, 1969. Your reference committee concurs in this decision."

There is continuous review and evaluation of AMA structure and programs, the committee said.

"Changes in the Constitution and Bylaws at every meeting bear this out. Recent changes in membership provisions with respect to interns and residents, as well as current changes in the status (Continued on Next Page)

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of medical students and voting powers of the vice president are prime examples."

The committee said the Council on Long Range Planning and Development was an appropriate mechanism for reviewing structure and programs, and to serve as a focal point for planning activities.

The panel said it believed the Board of Trustees was "vigorously pursuing" the problem with membership and that the President's concern about AMA involvement in scientific matters "will be alleviated by recent changes in the Constitution and Bylaws establishing Section Councils which will become operative in 1972."

Many of the problems faced by medicine come from social unrest and are common to all society, the committee said. It said Doctor Hall, "in his tireless efforts in appearances throughout the country, has seen this unrest and is to be commended for bringing this to the attention of the House of Delegates."

The House accepted the committee's recommendation to refer Doctor Hall's remarks and Resolution 50 to the Council on Long Range Planning and Development. But it also called for specific procedures to be instituted by the Council.

This came in an amendment from the Wisconsin delegation, whose spokesman said it came to the convention "with a mandate to seek a constitutional convention or some type of meeting to effect organizational changes." The amendment instructed the Council to hold open hearings for the membership in San Francisco in June, 1972, and n Cincinnati in November, 1972, and provide the House with progress reports and a summary report on its recommendations and findings in June, 1973, in New York.

VICE PRESIDENT

There was overwhelming support for Resolution 55, to give the vice president of the AMA voting privileges on the Board of Trustees, and the measure was quickly adopted by the House. Presently, the vice president attends Board meetings, with the right of discussion but no vote. The action would increase the size of the Board from 15 to 16 members. Although the House vote had the effect of amending the Bylaws, a Constitutional change is necessary, and the matter was referred to the Council on Constitution and Bylaws. Even as discussion continued before the House, the Council came up with the necessary proposed

(Continued on Page 56)

District Medical Society Meetings

WASHINGTON COUNTY MEDICAL SOCIETY

The quarterly meeting of the Washington County Medical Society was held at the Elm Tree Inn, Pawcatuck, Connecticut, on Wednesday, October 13, 1971.

The meeting was called to order by Dr. Mauricio Goldberg, President, at 11:40 a.m. Members present were: Drs. F. Bruno Agnelli, Gregory M. Burbelo, Frederick Eckel, Mauricio Goldberg, Linwood H. Johnston, Valentine P. Klymenko, Robert E. Knisley, Attilio Manganaro, William H. McDermott, James A. McGrath, Gordon E. Menzies, Joseph J. O'Neil, Francis M. Palaia, Jacob Pysariw, Erwin Siegmund, and Juliana R. Tatum.

COMMUNICATIONS

A letter from Mr. Edward J. Lynch, Assistant Executive Secretary of the Rhode Island Medical Society, was read regarding our motion to place members on an honorary active status with exemption of dues at the age of 72. He made us aware that both AMA and the Rhode Island Medical Society bylaws provide or retirement and exemption from dues at the age of 70. This was so moved by Doctor McGrath and seconded by Doctor Siegmund.

COMMITTEE REPORTS

Report from Delegate — Doctor McGrath reported on the House of Delegates. The Society is working to establish the formation of medical foundations. This is being pursued and further reports will follow. He also summarized Doctor Kraemer's report on the Committee for the Aging.

Report from Council Members — Doctor Agnelli reported from the Council that the Council is reviewing medical expenses and that the physicians should be made aware of medical expenses. Also that PAS statistics be given out without revealing any names of individuals.

The Council has also recommended that doctors in the service in Rhode Island or in the state temporarily be given full membership in the Rhode Island Medical Society except these members may not be counted in voting for delegates to the Society.

The Council has also recommended that Brown University be urged to complete its study and the Society endorse them in their establishing a four-year medical school program.

Report from Treasurer — Balance in treasury \$1,026.77.

Report from Doctor Tatum — A model of the Mental Health Clinic now reaching completion in Charlestown was shown. A report on work being done at the clinic-care load etc. was also given. Doctor Tatum also stressed the need for further funding to furnish the new clinic. Doctor Eckel moved and it was seconded by Doctor Agnelli that the membership of the Washington County Society be actively solicited to make donations to the Mental Health Clinic.

The meeting was adjourned at 12.40 p.m. Dr. Max Bloom presented a program on new advances and findings in cardiac catheterizations and cardiac surgery being done at Miriam Hospital.

Respectfully submitted:

Francis M. Palaia, M.D. Secretary

* * *

PROVIDENCE MEDICAL ASSOCIATION

A joint meeting of the Providence Medical Association and the Providence Surgical Society was held at the Holiday Inn, Providence, Rhode Island on Monday, Nov. 1, 1971.

Dr. David Freedman President of the Association, called the business meeting of the Association to order at 8:45 p.m.

REPORT OF THE SECRETARY

Dr. Thomas Head, Secretary, reported that the Executive Committee had approved of the applications for active membership in the Association of the following physicians:

Maurice M. Albala, M.D.

Richard M. Bernstein M.D.

Frank M. Detorie, M.D.

Fakhreddin Entezary M.D.

Ben W. Feather, M.D.

Sidney Fink, M.D.

Charles P. Foote, M.D.

Salvatore Giarratano, M.D.

Luis S. Gomez, M.D.

Jane K. Nugent Hazard, M.D.

Theodore Hersh, M.D.

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(Continued on Next Page)

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Roger D. Raymond, M.D.

Mohsen Soltani-Hosseini, M.D.

Alain S. Wu, M.D.

He also reported that the Executive Committee had received and approved applications for Junior Associate Membership from the following physicians:

Farouk Elaty, M.D.

Paul R. Lichtenstein, M.D.

Action: A motion was made, seconded and voted that the nominees as approved by the Executive Committee, as reported to the membership at the meeting, be elected to membership in the Association.

ANNOUNCEMENTS BY THE PRESIDENT

Doctor Freedman reported with regret the loss of five members by death since the previous meeting of the Association. These members are:

James B. Moran, M.D. (April 8) R. Cannon Eley, M.D. (April 29) William H. Muncy, M.D. (July 19) Emanuel W. Benjamin, M.D. (July 24) James H. Fagan, M.D. (Sept. 28)

A moment of silent prayer was held in memory of these deceased members.

Doctor Freedman also reported that the 125th Annual Meeting would be the next meeting for the Association membership. To be held the evening of Jan. 5, 1972, at the Providence Biltmore Hotel, the meeting will be a dinner-session to which wives and guests of members are invited, and a social eveing will be planned following the formal program.

Doctor Freedman adjourned the business meeting of the Association at 9 p.m.

Dr. Stephen J. Hoye, President of the Providence Surgical Society, conducted a brief business meeting of that Society, and then he introduced as the guest speaker Dr. Norman Zamcheck, Chief, Gastrointestinal Research Laboratory, Mallory Institute, Boston, and Associate Clinical Professor of Medicine at Harvard Medical School. Doctor Zamcheck's lecture was on "The Use of Carcinoembryonic Antigen (CEA) Assay in the Diagnosis of Cancer of the Colon and Pancreas".

(Concluded on Page 58)



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Medical Care And Our Sick Society

Let Us Avoid Killing The Patient By Overtreatment

By David Freedman, M.D.

Many of you here tonight are too young to know from personal experience the historic changes in medicine that I and my contemporaries have seen. We can recall our early childhood and adolescence when "the doctor" was idolized and respected. He practiced the ART of medicine and whatever science of medicine was at his disposal. He incised boils, set some simple fractures, made house calls with his horse and buggy, or Model T Ford, delivered babies at home (if he arrived in time), but usually administered to the mother and baby whom some midwife or neighbor had delivered before he arrived. Without the effective drugs of today he had to sit helplessly by during the great pandemic of the "flu" in 1918 while his friends and patients died in such great numbers that burial of the victims was delayed for days due to lack of manpower. He was the friend of the family who applied whatever scientific knowledge was at his command and waited for the crisis to occur in pneumonia, or the pain to subside in so-called

DAVID FREEDMAN, M.D., of Providence, Rhode Island, former Chief of Surgery at The Miriam Hospital, current Consulting Surgeon at that hospital and Rhode Island Hospital.

Presidential Address delivered at the 125th Annual Meeting of the Providence Medical Association, Providence, Rhode Island, January 5, 1972.

"acute indigestion." He advised the parents when to place or remove the multi-colored contagion cards of scarlet fever, diptheria and other contagious diseases from the front doors, but always hoping and praying with the parents that their children would survive and not develop nephritis, cardiac conditions, mastoiditis, empyema, and all of the other horrible complications. The doctor. with a great deal of art and very limited scientific armamentarium, was always a good friend, advisor, counsellor. He was considered an outstanding person in the community, he was respected and at times idolized. We owe it to ourselves and our profession to examine what developments have taken place to affect this doctor-family relationship and endeavor to see what has happened and what can be done about it.

THE SCIENCE vs. THE ART OF MEDICINE

Medicine has come a long, long way—the science of medicine has largely displaced the art of medicine. The diabetic can now live a relatively normal life without the constant fear of leg amputation, death from coma, and all the other complications of his disease. The patient with pernicious anemia who usually died within two years of the onset of his disease now lives full lifespan. The death rate from simple lobar pneumonia was 25 per cent (1 out of 4), despite the patient's previous good (Continued on Next Page)

health and youth. If the patient survived, he commonly developed empyema with the necessity of repeated chest operations for drainage of collections of pus from his chest cavity, and he faced a very long convalescence. Now, this same patient does not even require hospitalization and is well within a relatively short period of time.

When I was in medical school, it was categorically stated that "once an osteomyelitic, always an osteomyelitic." A simple infection such as a furuncle or abcess could provide osteomyelitis which required recurrent long hospitalizations with multiple operations consisting of drilling of the ends of the bones to evacuate the pus, other operations for removal of bone sequestra, constant changes of filthy, foul smelling dressings, and even placing maggots in the wounds to help remove the filthy debris.

I ask. How often does a patient go through this ordeal today? Infectious diseases such as diphtheria, typhoid fever, whooping cough, undulant fever, and paralytic poliomyelitis have been eradicated or controlled. Infectious disease hospitals have been closed; tuberculosis sanitoria are decreasing in number. Insanity and the myriad complications of all the organs of the body from syphilis are rarely seen today. When I was in medical school we were taught that if we knew everything about syphilis we knew medicine—but the medical student today rarely sees or considers syphilis in his differential diagnosis. We rarely see a case of blindness or stiff joints from gonorrhea. Subacute endocarditis and streptococcus septicemia, which used to be 100 per cent fatal, now rarely causes death. Mastoid operations for acute mastoiditis are a rarity. Patients with hyperthyroidism no longer require multiple operations to prevent thyroid crisis and death.

Discovery of new drugs, vaccines, antibiotics and chemicals, technical advances, new operative techniques, institution of Intensive Care Units, discoveries in anesthesia, blood banks, improved and new laboratory tests and machines, replacement of blood vessels, transplantation of kidneys, corneas, and even hearts, have made it possible to operate and treat every part of the body to prolong life, spare a patient untold suffering, decrease his hospital stay, and allow him to return to his occupation or job sooner and as a much more comfortable and healthy citizen.

This present day high level of medical care is

only too easily taken for granted. How many critics of medical care give credit to the lliant discoveries of the relatively few great menter medicine, but fail to acknowledge the contributions to the high level of care by the overwhelming majority of our doctors? How many critics take note of the average doctor's long, hard and costly years of preparation for his career in medicine, and give credit to the doctor's daily commitment and lifelong devotion to the ideals of his profession.

CONCERN FOR THE PATIENT

Most doctors still have a deep concern for their patients. They worry about them—make a midnight call at the hospital before going to bed after a long hard trying day—sometimes spend a restless night thinking about a desperately ill patient. During the day the doctor will interrupt his schedule to administer to and treat a patient who should have priority on his time. Patients who have appointments at the same doctor's office usually understand why their appointments are cancelled or why they have to wait, but a few patients just "can't understand why they are kept waiting" and feel that the system is wrong and "want something done about it."

Some people don't recognize that most doctors work 12 to 18 hours a day and sometimes around the clock, seldom have an uninterrupted night's sleep or a week-end off, and sometimes even delay or forego a much needed vacation because of the needs of a very sick patient. This is not usually recognized by patients unless it involves them directly.

PAPER WORK

There are other facts which I am sure everyone knows that should be noted and recorded. Most doctors spend 12 to 15 years after graduating from high school before starting in practice (and this is expensive). Their time is really never their own —they neglect their families and friends—they are under constant tension. Besides treating patients, they spend many hours a day doing "paper work," including keeping patients' office records in order, filling out the many forms required for temporary disability compensation, health insurance, including supplementary forms if the illness is a prolonged one, Blue Shield, Medicare and Medicaid, as well as those relative to hospital utilization review, nursing home and district nurse referrals, Cancer Registry, and many more. Reports to lawyers and other doctors must be prepared. The doctor is a slave to the telephone day and night.

In a sition, the doctor has much hospital paper work a carry out. This includes histories and descriptions of physical examinations, admission and progress notes, Blue Cross and Medicare forms, and complete discharge notes on all patients.

DOCTOR'S "TIME OFF"

The doctor also attends hospital clinics, serves on many hospital and medical society committees, attends scientific meetings at the hospital and at local, state, and national societies, and teaches interns and residents. All of this is in addition to furthering his knowledge by reading the latest reports in medical journals. These comments regarding how a doctor's time is spent are intended to emphasize that he has very little time for himself—since much of this work is done on his socalled "time-off," such as weekends and nights when he should have the opportunity to rest and have some social life and relaxation.

The doctor's image has changed despite the fact that his first concern is for his patient. We are criticized by the government, press. radio, and television for all of the medical economic and social problems which exist today—but especially for the high cost of medical care and the lack of care to certain groups.

The high cost of medical care is not the fault of the medical profession. Our fees have not increased any more than any other business or profession and the increases have paralleled the degree of inflation. We, like everyone else, have to pay more for rent, labor, and supplies. No one (including press, radio, and television) in discussing medical care costs emphasizes that hospital costs are the major item in the patient's bills, and that the increase in hospital costs is related mainly to labor costs. Wages alone account for approximately 75 per cent of most hospital budgets. In addition, the increase in expenditures for medical supplies. drugs, and food are also basically increases in labor costs-so the true labor factor is increased from 75 per cent to a more realistic figure of about 85 to 90 per cent. But labor organizations that are very vociferous in their condemnation of the doctors and hospitals should analyze their thinking and look to the obvious reasons for most of the increased medical costs.

HOSPITAL COSTS

Everyone, especially the medical profession and

the hospital administrations, is working on methods to reduce hospital and medical costs, but no one-doctors, administrators, or the general public-would want to see a decrease in the quality of medical care. The sophisticated electronic equipment, nuclear medicine advances, new laboratory facilities, intensive care units, advanced and improved technical operative procedures, kidney machines, are all very expensive, but, we all agree, are desirable and necessary and are not plentiful enough in certain areas of this country. We should all face the fact that there is a medical advancement revolution occurring in our country and in many countries of the world. Increased costs for these life-saving and health-giving procedures are a byproduct of this revolution. Adjustments are necessary, clear thinking is required, cooperation is mandatory, but unjustified criticism, trying to pass the buck to the doctor who is doing his utmost to provide the best possible medical care for h's patient is not the way to solve our problems.

Our Society is changing and rumbling—there is dissatisfaction with everything by everyone, and everyone is critical of everyone else. There is dissortent and criticism of the "establishment" not only by the youth but by all segments of society. The medical profession has not escaped this criticism. Much condemnation has come from our leaders in government who should cooperate with us in analyzing and attempting to correct the faults in our medical care system instead of looking for a scapegoat. We know that much can be done and should be done to improve the medical climate of this country and to deliver good medi-

(Continued on Next Page)

SOCIALIZED MEDICINE

Because of socialized medicine, England's hospitals have a backlog of individuals who need non-emergency procedures. A 21-year-old man applied for a post with a special police force. But before he could enroll, he had to have his hernia repaired. The hospital surgeon who finally saw him put him on the waiting list and told him it might take four to five months. Seventeen months later, he was finally admitted. Ironically, his appendix was taken out by mistake. And to make matters worse, complications set in, and by the time the hernia was repaired, he was over the age limit (24) for enrollment in the force. Providence Journal, January 5, 1972.

cal care to everyone—the average citizen, the poor, the elderly, and the people in rural areas. Some legislators talk and some shout about the "crisis" in medical care today. There is no "crisis"—there is a change taking place. We all know that "change does not necessarily mean progress." Destroying our basic medical system for an entirely new one will be a great disservice to our people. Everyone, and especially our legislators and government officials, must realize that many of the ills which the medical profession is treating today are the result of our "sick society" and are basically socio-economic. The doctor sees only the top of the iceberg, but the main problem lies below the water's edge.

SOCIAL PROBLEMS

Inadequate housing, clothing, and sanitation, malnutrition, poor education, pollution, inadequate income, and many other social factors in the slums and among the Indian population and migrant worker areas must be corrected as a corollary to good medical care. Should the medical profession accept the total responsibility for:

- 1) the 50,000 yearly deaths and 2 million injuries caused by that prime weapon of violence—the automoble?
- 2) the 200,000 drug addicts, many of whom die from suicide and other diseases inherent in their addiction?
- 3) the millions of alcoholics and problem drinkers whose final problems are medical—but it was not failure of health care which lured these men and women into their desparate condition?
- 4) the 60,000 deaths yearly from our own created epidemic of lung cancer?
- 5) the thousands of deaths and injuries from avoidable accidents in the home?
- 6) the 700,000 lives from heart disease, atherosclenosis, and stroke, when people will continue to smoke, overeat, and under-exercise despite warnings and advice from the medical profession?
- 7) the over 300,000 mental and emotionally ill people, many of whose problems have their origin in socio-economic disorders?
- 8) venereal disease which is increasing at an alarming rate because of lower moral standards, lack of education, or refusal to heed educational advice, as well as deficient public funds to attack the problem?

- 9) the 100 to 200 deaths from tetanus and the occasional small outbreaks of paralytic poliomyelitis and diphtheria which are preventable?
- 10) the 40,000 cases yearly of tuberculosis which can be attributed mainly to poverty?
- 11) the patient who is treated for pneumonia and then has to return to a home which lacks heat; the child who is poisoned by eating plaster which has fallen from the ceiling, only to be returned to the same surroundings and exposure which existed prior to his hospitalization; the child who has been neglected or even beaten by his parents; the drug addict or alcoholic who returns to the same environment after his treatment?

These are but a sampling of types of cases which the doctor treats but which are basically problems for government and society, problems not attributable to deficiencies in doctor care.

STANDARDS OF MEDICAL CARE

The American citizen is now receiving the best medical treatment in the world despite the claims of critics who quote lower infant mortality rates in such countries as the Ryukyu Islands and Sweden. We should recognize that there are no uniform standards for compiling statistics of many medical conditions. It is especially unfair to compare a small country like Sweden with a homogeneous population of eight million people to our huge sprawling country with its disparate population groups. Russia, a nation comparable to our, has a less favorable medical experience than ours.

I am not trying to say that the practice of medicine is as good as we would like it to be. We still don't know how to prevent cancer, hypertension, atherosclerosis, arthritis, gout, diabetes, mycarditis, gallstones, renal stones, and many other diseases. It is worth repeating, however, that the mortality, morbidity, and cost associated with many diseases are not the sole responsibility of the medical profession but basically that of the government and of the average citizen. If all the preventable diseases could be eradicated by education and our social ills cured, the cost of medical-health care could be greatly reduced. But the situation exists, and the cry for economy in the delivery of health care continues and grows londer from segments of society-government, organized labor, and individual citizens—which have failed to meet their own obligations.

PLANNING REQUIRES CARE

Delivery of medical care is a great problem and one which requires sound and deliberate thinking, cooperation, and consultation among the medical profession, hospital administrators, medical educators, and government. The medical profession should be represented not only by leaders of the profession, but by doctors who actually deliver the medical care and who are "the Indians and not the chiefs." Medical educators must realize that while some doctors should be trained for research and specialization, there is also a great need for family practitioners, especially for the rural areas. Government representatives must be responsible individuals who forego political expedience and refrain from advocating for political gain the reorganization of the delivery of medical care. We must not again fall into a trap as we did with Medicaid and Medicare, which were poorly and hastily planned and, I assume, implemented for political reasons. They have been very expensive and poorly executed, and they have crowded hospital space because of inadequate posthospital extended care facilities, such as adequate nursing and convalescent homes. As you know, this has led to extensive and expensive over-utilization of hospital beds for older patients awaiting placement in extended care accommodations. I am sure that each doctor can recall cases of this type which have needlessly cost the Medicare plan huge sums of money. Situations similar to those under Medicare will undoubtedly occur if a hastily or ill planned system is rushed through Congress, other than a sound, thoughtful, and well-conceived system developed with the full and honest cooperation of everyone.

BILLS BEFORE CONGRESS

Approximately 15 bills have been introduced into Congress relative to health care and its delivery. These include the Nixon or Administration bill which projects a cost of 12 to 14 billion dollars a year at a cost, by 1974, of \$466 per household yearly, as opposed to the Kennedy-Labor bill for National Health Insurance which would cost the Federal government approximately 77 billion dollars annually by 1974 and would mean the average household cost would be triple the above, or \$1,271 per year. Bills have also been introduced by the A.M.A. (Medicredit), insurance companies, and individual congressmen. As Jimmy Durante would say: "Everyone wants to get into the act." It is generally agreed that health care delivery will be a paramount political issue in 1972

— an election year when both parties and many politicians will be jockeying for political advantage. The *problem* of delivery and cost of health care is a legitimate concern. Those who have made a concerted effort to generate a *crisis* in health care too often have based their arguments on "fallacy, half-truths and myths" and would for their own political or personal advantage rush any measure through Congress. The issue is too important and serious for hasty decisions and hasty legislation. Progress and improvements in our system should proceed at a pace which will allow optimum, honest, unprejudiced, and not politically motivated consultation, coordination, and cooperation of all segments of society.

I think that the Secretary of Health, Education and Welfare, in discussing the Kennedy-Labor bill, showed keen insight and understanding when he stated in the Washington Post News Service in October, 1971: "Proponents of such a system seem to assume that radical intervention by the Federal government in health in an inflexible, predetermined, and monolithic manner is the only way to solve health organization and delivery problems. I suggest that we are more likely to attain our common health objectives by stimulating competition and by promoting consumer education and freedom of individual choice, rather than by resorting to coercion and unrealistically global schemes." Senator Warren Magnuson has noted the lack of proper coordination between professions and the government and has been quoted as saying: "We've got a good team, but need a good game plan for health care" --- and you football fans will understand what he says. President Richard M. Nixon recognizes that "a Nationalized Health Insurance would exact not only a very high price from our people in terms of dollars and cents, but would exact an even higher price in terms of the quality of American medicine, and will do the most to hurt American health care. When the government pays all the bills for health care, then the government becomes the only party with a strong interest in restraining costs. This inevitably means that the government officials must approve hospital budgets, set fee schedules and take other steps that would lead to the complete Federal domination of our medical system."

CANADIAN EXPERIENCE

It would be unfortunate if we did not learn a lesson and benefit from some of the mistakes and (Continued on Next Page)

experiences which occurred in Canada recently. In 1961 government operated insurance was introduced in Canada, and since then all in-patient hospital services have been virtually free to the Canadian citizen. (Incidentally, I might add that about three years ago I operated on a young housewife from Montreal who had waited six to eight months for a cholecystectomy despite repeated severe attacks of pain, but was told that she would have to wait at least another three months for a hospital bed. At that time she came to Providence, R. I. for her operation.) In 1968 the second step toward complete, planned, paid-up health care was introduced. Because of the lack of open discussion, cooperation, and flexibility a near disastrous condition resulted. A strike of the doctors produced "intolerable anguish." The strike was "eventually settled and a peaceful entente has been signed awarding much that the profession had sought for." But as Dr. Maurice McGregor (Dean of Faculty at McGill University) has stated: "We are left with some emotional scars and a profound belief that we do not wish ever to again live through such an episode." Doctor McGregor also mentions that strikes are "not unique to Montre"! or Canada and comparable happenings have taken place elsewhere in the world. Their consequences are more destructive than ordinary strikes. Furthermore, they will continue to occur with ever increasing frequency as state governments assume greater control over health professions." He further states: "What is important is that we must avoid from the beginning a situation where the state and the profession even start to assume the position of adversaries — this requires a bilateral effort. It requires that the state should consult widely with the profession before instituting changes which affect medicine." He adds: "I believe that our government was unduly precipitate in introducing legislation which profoundly affected the practice of this ancient profession, Equally important, however, our profession must earn for itself a leadership positive in the thinking, the research, and experimentation which ought to precede such steps. There is no other body with appropriate expertise. It is we who operate the hospitals and offices, we who are most aware of its defects, and we who should be competent to point out where change and reform is most necessary. Above all, it is we who should know just how such changes should be brought about."

Let us keep this Canadian lesson in mind. To

solve our problem honest, non-political, open discussion and consultation by all groups of our country are required. The medical profession only too clearly recognizes the government's concern in the health care of its citizens, but, in turn, the government must recognize the interrelationship of medical care and the ills of society with its strikes, inflation, unemployment, greed, graft, corruption by officials at all levels of government, racial and other riots, revolt against the establishment, student and youth unrest, opposition to war, disregard for law and order, lowering of moral standards, and many other social ills, including political motivation at the expense of society. I wonder if our sick society isn't more important than our present physical illnesses.

THE THREE DYNAMICS

Success in reforming, modifying, or improving any system of medical care depends on balancing three strong competing factors or dynamics: 1) Universal access to medical care, 2) Desire to control cost, and 3) Desire for a high quality care. It must be realized, however, that incorporation of all three of thase dynamics would be so expensive as to prohibit such a plan. If two dynamics are incorporated, this works against the third. That is:

- A) If universality of access is combined with tight cost controls, the quality of care suffers
- B) When easy, universal access to medical care is combined with an attempt at quality care, the combination works against cost
- C) If high quality of care and rigorous efforts to control costs are combined, there is difficulty with access to care.

Thus it is obvious that a perfect health care system combining the three dynamics of universal access, quality care and low cost is extremely difficult to create, even if other factors such as geographical distribution and manpower did not complicate the picture.

REDUCING COSTS

In this country we have good quality of medicine — and this cannot be denied. Efforts are being made by hospital administrators; third party groups such as Blue Shield, insurance companies, and foundations; and doctors to reduce costs without lowering medical care quality. Doctors are trying to reduce costs by pre-admission tests, reduction in the utilization of hospital beds, peer review committees, improvement in emergency ward care, reducing the numbers of non-emergent cases seen in the emergency room, and in many other ways, despite unjustified criticism from some government officials, labor leaders, press, radio and television. We must recognize that we are subject to a very erratic medico-legal system, which, through the threat of malpractice suits, causes increases in medical costs by impelling doctors to practice defensive medicine by ordering unnecessary laboratory tests and consultations.

The problem of manpower is challenging medical educators to develop novel plans for medical training of physicians, physician assistants, and paramedical personnel. These programs are merely alluded to here, but a lengthy paper could be written on any one of them.

No matter what methods may be developed for reduction of medical costs, medical care delivery will inevitably be expensive. Quality care frequently involves the services of an internist, a surgeon, or other medical and surgical specialists, as well as hospital based physicians such as radiologists and pathologists. New technical skills reated to advancements in knowledge and technology have also added to costs. An astronomical expansion in medical equipment and supplies has resulted from this highly sophisticated medical technology.

GROUP PRACTICE IN RHODE ISLAND

In an effort to improve health delivery care and reduce costs, our Federal government has encouraged the establishment of various types of group Maintenance Organizations), medical practice. It is supporting financially H.M.O.'s foundations, and research groups. While all of these plans are expensive, the government appears to be willing and eager to experiment (and, I hope, experiment) with them. Whether these new organizations will be worthwhile is still to be proven. In the past many group plans have failed, but a determined, honest effort to achieve success with these groups should be made. We have a fair sampling of groups in Rhode Island. A new corporation known as Search - the Rhode Island Health Services Research Foundation, Inc. — has recently been established. In addition, there are the Bristol Medical Associates Group Health Plan, the Rhode Island Group Health Association plan

(union sponsored with a grant from the government) and the Providence Health Centers, Inc. an Office of Economic Opportunity (O.E.O.) organization supportedly recently by a two million doilar government grant. In addition, the Rhode Island Medical Society "has authorized its president to appoint an ongoing committee to study all facets of the health delivery system, and has approved in principle the idea of a medical foundation under Society auspices if advisable and feasible, and has endorsed the action of the Council in calling for a long-range planning committee to consider the role of the Society in the years ahead and the operation of pilot programs locally of new health care delivery plans.

The Society has always supported experimentation in the new methods of delivery of health care provided such programs are developed on a sound and effective basis. We have worked closely with the State Departments of Health and of Social and Rehabilitative Services to develop and improve programs of medical assistance to the people of Providence. We have never sought to exercise control in any of these programs, but we have continually sought the opportunity to bring the expertise of the physicians treating the sick and disabled to the conference table when programs are being considered and planned to change and improve medical service. We have been quite disturbed at the lack of cooperation of the neighborhood health centers' executives in not accepting our offer for assistance and advice on the medical phases of the planning. We feel that some of our ideas could be desirable and beneficial, but we have been almost completely ignored. This lack of cooperation is certainly to be condemned. All of these programs are experiments, and they have yet to prove clearly, that they can do a better job, and at lower cost, than is currently available to the public. At the moment they are very costly and have not provided an improved comprehensive care, or even a quality of care up to previous standards.

Many innovative programs, including the H.M.O.'s will serve as experimental models for financing medical care. They have not yet been proven to be the answer to guaranteeing quality medical care while containing costs. The opposite seems to be the case. Results will be interesting, and should be watched. Senator Claiborne Pell reported that he was instrumental in obtaining

(Continued on Next Page)

two million dollars for the local O.E.O. program. He stated that "we must develop more health maintenance organizations — local centers where the emphasis is on preventing illness before it strikes." But I maintain that preventive medicine is largely in that area of government related primarily to our socio-economic status, which includes such factors as housing, nutrition, education, standard of living, and all of the other social conditions which have been previously mentioned. Preventive medicine per se to date has offered little that will be accepted and used by the person who feels well.

Another grant of one million dollars has been given to the state for Search, previously mentioned, a statewide corporation which is working to encourage innovative health care programs in our state. What has been done with this program and what are the results from it? I would like to see a report.

CAUTIOUS APPROACH INDICATED

The expensive Harvard Community Health Plan which projects a two year operating deficit of two million dollars should signal a "go-slow" approach to the universal application of this deliveryfinancing system. All of these programs are expensive, and it seems that anyone who proposes a new program can obtain a government grant. I approve of innovation and experimentation, but I also am aware of the expense. I must express reservations regarding a plan's ultimate effectiveness in producing results which can be so easily spelled out on paper, but may me extremely difficult to accomplish. The economic pressures of a prepayment group to remain within a budget can be intense. Under-utilization of medical resources may thus result which will be infinitely more harmful than over-utilization and may produce a much inferior quality of medical care. Too much doctor manpower may be used for the well and worried well patients at the expense of the sick patient. The reassurance which so many sick patients now receive from their own private doctors and which is so essential to patients will undoubtedly be lacking.

CHALLENGES AHEAD

This lengthy address has touched only superficially on many aspects of the delivery of medical care. A paper could be written on each phase of the problem. The whole problem is a very complex, intriguing, and complicated one, but a very important one which cannot be solved quickly or by hasty decisions, or by one segment of society. It requires the cooperation of everyone — the medical profession, hospital administrators, government, labor, social workers, educators, the clergy, and the individual citizen. Experimentation and honest, sincere, cooperative planning disregarding personal benefit or political gain, are essential ingredients for a successful program. We must insist in all this planning that the sick person be assured the right to exercise the free choice of his own physician. Let us avoid a situation similar to the "welfare mess which we have today" or to another "medicaid" wihch is headed for the scrap heap. It is pertinent to quote Paul Rogers, U. S. Congressman from Florida, who has stated in 1971: "If you think Medicare is a mess, watch out for the medical monster lurking now in the bills submitted to Congress. If next year a national health service plan is delivered into law, no adequate planning will have been done in advance to marshal and increase our resources to meet the demand which this will bring about. We would have a situation similar to the first two years of Medicare, if not worse, simply because of increase in magnitude."

We have a challenge to meet. The challenge is a huge one. It has been well stated that if we can work together to avoid a huge revolutionary monolithic federal medical system but realistically appraise the salient accomplishments of our pluralistic medical system, build on the strengths and outstanding framework which now exists, and eradicate any weaknesses in our present system, we will cure our most difficult and ornery patient—the sick society. Let us avoid killing the patient by overtreatment.

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ONE SENTENCE ESSAY Shaffer's Law

The effectiveness of a politician is inversely proportional to his commitment to principle.

. . . Sam Shaffer, political writer.

One Sentence Essay

The story goes that President Lincoln, when informed of General Grant's imbibing, inquired about the brand of whiskey so that some could be sent to other Union generals.

. . . Editorial in JAMA, Nov. 8, 1971.

Surgical Resection of Aneurysm of the Abdominal Aorta: Experience with 137 Consecutive Cases

Elective Operation Improves Survival Expectancy Significantly

By James J. Yashar, M.D., and John Yashar, M.D.

Aneurysm of the abdominal aorta is a serious disease causing death from ruptore or hemorrhage in a majority of the patients within a few days or weeks after the onset of symptoms.⁷, ² Even the life expectancy in patients with asymptomatic abdominal aneurysm is severly limited. Death will occur in approximately half of the cases within a year, and in about 90 yer cent within five years. ², ³, ⁴, ⁷, ¹², ¹⁴ Thus the presence of an abdominal aneurysm is a constant threat to the patient and demands prompt treatment. On the other hand, experience wih excision and replacement of the abdominal anurysm has shown a significant improvement in the survival of these patients. ², ³, ⁴, ⁸, ¹¹

CLINICAL MATERIAL

This is a report of our experience with excision of abdominal aneurysm and replacement by graft in 137 consecutive patients. During a twelve year period from September 1, 1958 to January 1, 1971 of these 137 patients 105, or 76.6 per cent, had resection of unruptured abdominal aneurysms, while 32 patients, or 23.4 per cent, underwent emergency surgery for ruptured aneurysms.

JAMES J. YASHAR, M.D., Thoracic and Cardiovascular Surgeon, Providence, Rhode Island JOHN YASHAR, M.D., Thoracic and Cardiovascular Surgeon, Providence, Rhode Island

(Table I). Ages ranged from 40 to 90 years. The highest incidence was in the sixth and seventh decades of life. The average age was 69 years. It is significant that 83 per cent of the patients were 60 years of age or older. The ratio of men to women was 3.6/1 (Fig. 1).

SYMPTOMS

Eleven patients, or 8 per cent, were asymptomatic, the abdominal aneurysm having been discovered on routine physical examination, roentgenographic examination, or abdominal operation for an unrelated disease. The most common symptom was pain, occurring in 112 patients, or 83 per cent. (Table II). One hundred-and-two patients, or 76 per cent, had epigastric pain, back pain, or both caused by necrotizing changes in the wall of the aneurysm. Ten patients had back pain with radiation to the groin, hip, testicle, or leg caused by dissection or rupture of the aneurysm into the psoas or pelvic areas. Twenty-five patients complained of intermittent claudication of the lower extremities caused by associated arteriosclerosis obliterans. Twenty-three patients had syncope, hypotension, shock, and generalized abdominal tenderness due to rupture of the aneurysm in the retroperitoneal space of the abdominal cavity. Twenty patients sought medical advice because of the appearance of a pulsating abdominal

(Continued on Next Page)

Type of Aneurysm	Number of Patients	Per- cent
Nonruptured Ruptured	105	76.6% 23.4%
Total	136	100.0%

Table II Symptoms

Type of Symptoms	Number of Patients	Per- cent
None	11	8 %
Pain	112	83 %
Back	48	36 %
Epigastric	54	40 %
Back with radiation to the hip	10	7 %
Claudication	25	18 %
Syncope	23	17 %
Pulsating Mass		15 %
Gangrene of the toes		4.4%

Table III
Physical Findings

Findings	Number of Patients	Per- cent
Pulsatile Mass	. 85	62%
Abdominal Rig'd'ty	. 28	21%
Tenderness over the aneurysm	. 21	15%
Hypotension and Shock		17%
Anemia	. 10	7%
Gangrene of toes		4%

mass. Six patients complained of bluish discoloration or impending gangrene of the toes as a result of arterial emboli originating from the abdominal aneurysm.

CLINICAL DIAGNOSIS

The most common finding on physical examination was the presence of a pulsating abdominal mass in the epigastric area or to the left of the midline. This occurred in 85 patients, or 62 per cent (Table III). A pulsating mass was not palpable in 35 patients because of obesity and in 20 patients who were in shock and had severe abdominal rigidity. Twenty-eight patients had generalized abdominal tenderness with spasm of the abdominal wall due to leakage of the aneurysm. Twenty-three patients were hypotensive and anuric due to rupture of the aneurysm into the abdominal cavity or retroperitoneal space. Ten patients were pale because of leakage of the abdominal aneurysm. Six patients had bluish discoloration and gangrene of the toes.

ROENTGENOGRAPHIC FINDINGS

Plain roentgenograms of the abdomen in the aneroposterior or lateral positions revealed calcifi-



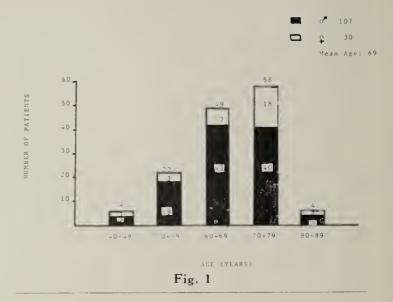


Table IV Associated Cardiovascular Disease

	Number of Patients
Hypertension	75
Coronary Heart Disease	
Old Myocardial Infarction	49
Angina Pectoris	29
Rheumatic Heart Disease with	
Aortic Valve Replacement	1
Arterial Insufficiency	
Femoral and popliteal	15
Iliac	6
Carotid	6
Renal	2
Mesenteric and caelial	
Aneurysm	
Thoracic	3
Popliteal	2

cation outlining the abdominal aneurysm in 116 patients, or 85 per cent (Fig. 2).

Aortography was employed in 27 patients, or 20 per cent, when diagnosis of an abdominal aneurysm could not be established by physical examination or plain roentgenogram. Aortography was also used when suprarenal involvement was suspected or to determine the location and extent of associated occlusive disease of the renal and iliac arteries (Fig. 3).

ASSOCIATED DISEASES

Since the underlying pathology of abdominal aneurysm is arteriosclerosis, the majority of the patients had associated cardiovascular disease. Seventy-five patients, or 55 per cent, had arterial hypertension, and seventy-eight, or 57 per cent, had coronary artery disease in the form of angina pectoris, myocardial infarction, or both (Table IV). Segmental occlusion or aneurysm in other major arterial trunks occurred not infrequently.



Fig. 2

Roentgenogram of the abdomen reveals a large fusiform abdominal aneurysm. The wa'l of the aneurysm is outlined by calcium.

Common sites of regmental occlusive disease were in the iliac and femoral arteries (in 21 patients) and in the internal carotid (in 6 patients). Five associated aneurysms were encountered in the thoracic aorta and popliteal artery.

TREATMENT

Treatment consisted of excision and replacement of the abdominal aneurysm with a prosthetic graft. Seven patients with abdominal aneurysm without involvement of the aortic bifurcation had tube graft replacement. This is in contrast to 129 patients, or 95 per cent, with aneurysmal involvement of the aortic bimurcation and proximal segments of the common iliac vessels, where the in-

volved segment was replaced with a bifurcation graft attached by an end-to-end anastomosis (Table V). In the presence of obstruction in the (Continued on Next Page)

Table V Type of Prosthetic Graft

Type of Graft	Number of Patients
Teflon® Dacron®	
Weaveknit® (Wesolowski)	
*One patient died in the O. R. before	

*One patient died in the O. R. before graft replacement.

7=Straight 129=Bifurcation

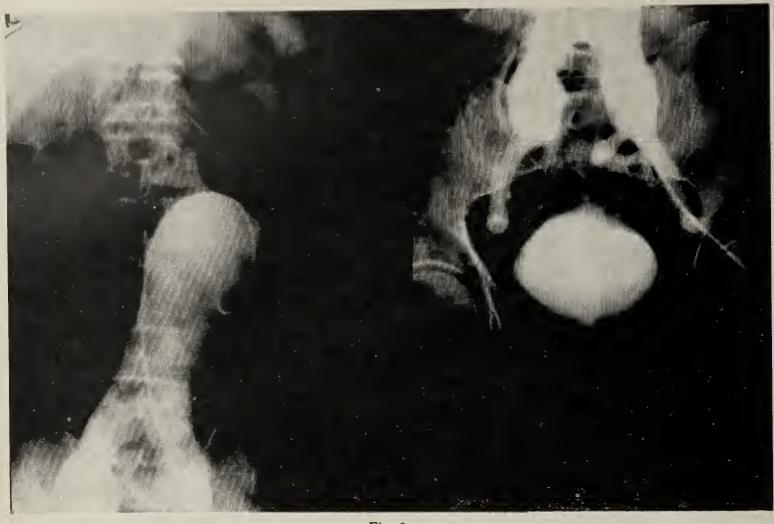


Fig. 3

Aortogram demonstrates aneurysm of the abdominal aorta arising below the origin of the renal arteries and extending to both common iliac arteries.

iliac arteries, the aneurysm was replaced and the obstructed iliac arteries were bypassed with a bifurcation graft placed end-to-side to the external iliac or common femoral arteries.

Many types of prosthetic aortic replacements were used during the twelve-year period (Table V). Teflon grafts were used almost exclusively during the early period until 1967. The high degree of porrosity and wettability, and the preclotting characteristics of Dacron and Weavenit® grafts made them the most desirable synthetic materials. ^{5, 9, 13} In January 1968 we began to use Weavenit grafts in the majority of patients.

OPERATIVE TECHNIQUE

Exposure is obtained through a midline abdominal incision from xiphoid to pubis. After general examination of the abdominal cavity, the intestines are brought out of the abdomen and covered with warm, moist towels. The small intestine with its mesentery is retracted to the right, and the transverse colon is retracted upward. The posterior peritoneum is incised to the left of the duodenum. The abdominal aorta above and below the aneurysm is separated from the adjacent tissues. A Weavenit® graft of appropriate size and shape is

preclotted by withdrawing 30 ml of blood from the inferior vena cava. Fifty mg of heparin is given intravenously. Vascular clamps are placed at points proximal and distal to the aneurysm. A longitudinal incision is made in the anterior wall of the aneurysm. The intraluminal clots and intima are removed from the inner layers of the abdominal aneurysm. By leaving in situ the outer layer of the abdominal aneurysm, the incidence of injuries to adjacent structures such as the vena cava and iliac vessel is minimized. The lumbar vessels are sutured with No. 00 silk. Endarterectomy of the proximal abdominal aorta is then carried out. The appropriate Weavenit® graft is anastomosed end-to-end to the proximal abdominal aorta with No. 0000 Tycron® sutures. At the end of the anastomosis the aortic clamp is released temporarily to flush out debris and check any leak at the anastomotic site. The right limb of the graft is anastomosed with No. 00000 Tycron® to the iliac or femoral arteries. Debris and clots from the right limb are flushed out by releasing the appropriate vascular clamp temporarily, and the aortic clamp is released temporarily to flush the graft. This maneuver will permit the removal of clots and

Table VI Associated Operations

Procedure	Number of Patients	
Sympathectomy	14	
Thromboendarterectomy		
Appendectomy		
Herniorrhaaphy		
Gastric resection	1	
Cholecystectomy	1	
Sigmoid resection	1	
Total	28	

Table VII Immediate Operative Results

Type of Operation	Number of Patients	Number of deaths	Per- cent
Elective	5	6	5.6%
Emergency	32	18	56 %
*Only 11 patients in sl	hock surv	rived.	

Table VIII Immediate Postoperative Complications

Complication	Number of patients
Cardiac Arrhythmia	12
Myocardial Infarction	6
Renal Failure	6
Thrombophlebitis	7
Pulmonary Embolism	
Cerebrovascular Accident	
Intestinal Infarction	2
Bronchopneumonia	6
Urinary Infection	4
Occlusion of the Graft	1

Table IX Cause of Late Death

Cause	Number of Patients
Myocardial Infarction Cerebrovascular Accident Infection of Graft Carcinoma of the Lung Carcinoma of the Stomach Automobile Accident (Pancreatits) Unknown	1 2 1 1
Respiratory Insufficiency	

debris from the aorta and graft through the unattached limb of the graft. The unattached limb of the graft is clamped, and the vascular clamps are released in order to establish circulation through one limb of the graft. Then the unattached limb of the graft is anastomosed to the iliac or femoral artery with No. 00000 Tycron[®], and the vascular clamps are released in order to restore circulation. In cases in which the aortic bifurcation is not involved, the resected segment of the abdominal aneurysm is replaced with a straight-tube graft

of appropriate size and shape. Thirty ml of a solution containing 20,000 units of bacitracin and 1 gram of Keflin® is poured around the graft. The outer layer of the aneurysm is closed snugly around the graft with continuous No. 0 chromic sutures. The posterior peritoneum is closed in similar fashion. The intestines are returned to the abdominal cavity, and the abdominal incision is closed in the usual manner.

The technique for treatment of ruptured abdominal aneurysm is essentially the same except for preliminary proximal control of bleeding. As the first maneuver after entering the abdomen proximal control is obtained manually compressing the proximal abdominal aorta against the lumbar spine at the level of the diaphragm. The uninvolved aorta between the renal artery and aneurysm is exposed, and a vascular clamp is applied to the abdominal aorta. The operation is then carried out as described previously.

Twenty-eight patients had procedures in addition to resection of the abdominal aneurysm (Table VI). Of these fourteen had unilateral or bilateral lumbar sympathectomy and six thromboendarterectomy for associated occlusion.

RESULTS

The immediate operative mortality in patients with ruptured abdominal aneurysm was 56 per cent, while mortality for elective resection was 5.6 per cent (Table VII). The high mortality among those with ruptured aneurysm was associated with shock and renal shut-down during the preoperative period. Only five of 23 patients who were in shock preoperatively survived the operative procedure. Six patients died in the operating room as a result of cardiac arrhythmias, of whom three had been successfully resuscitated preoperatively for ventricular fibrillation or asystole. Causes of death in 6 patients who had elective surgery included:: intestinal infarction (2), myocardial infarction (2), postoperative leakage from the vascular anastomotic site (1), and pulmonary embolus (1) (Table VIII). The crucial period in the postoperative period was the first thirty days after operation. There was no difference in late survival rate between elective and emergency resection of abdominal aneurysms. Sixty per cent of the patients who survived the immediate postoperative period lived five years regardless of associated cardial disease. Late death was due mainly to myocardial infarction or infection of the graft (Table IX).

(Continued on Next Page)

By far the commonest complications influencing morbidity and mortality were: cardiac arrhythmia or myocardial infarction, renal shut-down, and pulmonary emboli (Table VIII). Other minor complications in the immediate postoperative period were: bronchopneumonia, thrombophlebitis, urinary infection, and occlusion of the graft.

DISCUSSION

Estes, in analyzing 102 cases aged 65 with abdominal aneurysm, estimated that one-third, 33 per cent, were dead, usually from rupture, within one year after the diagnosis was established, while 18.9 per cent survived five years. This is in contrast to 79.1 per cent survival in normal individuals of comparable age without aneurysms. He also noted that the degree of symptoms had no relation to prognosis, since the patients who were asymptomatic at the time of diagnosis lived no longer than those who had symptoms. Wright¹⁴ in a review of 68 cases reported an even poorer prognosis; 39.7 per cent survived one year, and only 4.1 per cent survived five years after diagnosis of th abdominal aneurysm. Thus, the presence of abdominal aneurysm is a serious and constant menance to the patient and demands prompt surgical treatment. It was not until 1952 that Dubost⁶ et al first reported the successful application of excision and homograft replacement to the treatment of abdominal aneurysm. Progressive refinements in surgical technique and in vascular graft prosthesis have resulted in acceptable survival rates and low operative morbidity.

Our experience, lik that of others, ^{1, 2, 3, 4, 8, 10, 11, 12} indicates that arterial reconstruction can be safely employed in most patients with abdominal aneurysm regardless of the condition of the aneurysm, age and sex of the patient, or the presence of associated disease. Even in patients with associated heart disease, excision of the abdominal aneurysm resulted in longer survival than in untreated patients.

An important factor influencing survival is the condition of the aneurysm, as evidenced by an operative mortality of 5.6 per cent in elective resection. Nevertheless, despite a high operative mortality in resection for ruptured anurysm, 56 per cent, surgical management remains the treatment of choice. ^{3, 4, 10, 11} Hypertension and heart disease were present in 90 per cent of the cases, and were the most important factors influncing survivall. These associate diseases accounted for 63 per cent of early deaths, and 60 per cent of late deaths.

Sixty per cent of patients who survive the

immediate post-operative period lived at least five years regardless of associated disease. This is based upon the survival of 19 of 31 patients operated upon during the period 1962 to 1966 inclusive and therefore available in 1971 for a minimum five year follow-up. Bornstein et al. in an extensive review of the literature implied that elective surgical resection of abdominal aortic aneurysms did not significantly improve the life expectancy of patients over 70 years of age with clinical cardiac or hypertensive disease. Our data, however, like that of others 2, 3, 4, 10, 12 indicate that a substantially increased survival rate may be anticipated if elective resection of abdominal aneurysms is carried out as soon as the diagnosis is established.

SUMMARY

One hundred and thirty-seven consecutive patients with aneurysm of the abdominal aorta underwent resection and replacement with prosthetic graft during a 12 year period from September 1958 to January 1, 1971. Age ranged from 40 to 90 years, with the highest incidence in the sixth and seventh decades. The mean age was 69 years. The aneurysm was ruptured in 32 patients, or 23.4 per cent. Hypertension and coronary artery disease were present in 90 per cent of the cases. Various types of vascular replacement were used until it became apparent that the knitted Dacron® graft was the most satisfactory. The Wesolowski Weaveknit® graft has been used almost exclusively since January 1968. The most significant factors influencing the mortality rate were rupture of the aneurysm and the presence of shock. Immediate operative mortality was 5.6 per cent for elective cases and 56 per cent for ruptured aneurysms. The operative mortality in patients with ruptured aneurysm and shock was 3 times higher than in those with ruptured aneurysm without shock. Longterm follow-up revealed a 60 per cent 5 year survival despite the presence of associated disease and advanced age. Comparisons in the literature of long--term survival in cases with resected abdominal aneurysm with those not treated surgically show a significantly higher life expectancy for the former group. Moreover, our own experience supports the view that once the patient survives the operative procedure, his life expectancy more nearly approaches that of the normal population.

Because of the low operative mortality in elective cases, 5.6 per cent, and the poor prognosis in untreated patients, we strongly advocate elec-

(Concluded on Page 58)

Editorials

IS MARIHUANA ALL THAT HARMLESS

In a much quoted report in JAMA Kolansky and Moore,¹ Philadelphia psychiatrists, reviewed the medical literature as far back as 1934 and reported that the occurrence of psychosis and personality disorders associated with the use of marihuana had not been unknown. They themselves reported 38 individuals aged 13 to 24, all of whom showed adverse psychological effects from smoking the drug. Among the 20 male and 18 female patients, eight developed psychosis. Thirteen unmarried female patients became sexually promiscuous while on the drug. As noted below, the incidence of pregnancy and venereal disease was high.

The group, most of whom smoked two or more times weekly, showed very poor social judgment, poor attention span, poor concentration, confusion, anxiety, depression, apathy, passivity, and indifference, and often showed slurred speech. An alteration of consciousness which included a split between observing and experiencing functions, an inability to bring thoughts together, a paranoid suspiciousness of others, and a regression to a more infantile state were all common.

There was marked interference with personal cleanliness, grooming, dressing, and study or work habits. When these characteristics antedated the smoking of marihuana, they were always markedly accentuated. Among the subgroup of eight with clear-cut psychosis, four attempted suicide. In some individuals hyperactivity, aggressiveness, and agitation replaced apathy. These qualities had not been present prior to the use of the drug. The thirteen sexually promiscuous females were singled out because of the unusual degree of promiscuity. This ranged from sexual relations with several individuals of the opposite sex to relations with individuals of the same sex, individuals of both sexes, and sometimes individuals of both sexes on the same evening. The loss of sexual inhibitions after short periods of marihuana smoking was observed in all of these cases. Five of the girls became homosexual after starting to use the marihuana. Several girls became pregnant, one on several occasions, and four developed venereal disease. All showed confusion, apathy, depression, suicidal ideas, listlessness, feelings of isolation, and disturbances in appropriateness of affect and in reality testing. Among the thirteen, all of whom

attended junior high school, high school, or college, all showed a marked drop in academic performance, and the decline was in direct proportion to the frequency and amount of smoking.

At a recent conference on marihuana sponsored by the New York Academy of Sciences, physician participants took a dim view of the legalization of the drug. Reese T. Jones of the Langley Porter Neuropsychiatric Institute of San Francisco noted "a lot of similarities" between marihuana and alcohol. "But that only worries me more," he commented. Sidney Cohen of the National Institute of Mental Health, said, "Once you bring it into the culture, you'll never be able to get it out." Joel H. Kaplan, a psychiatrist who had served in Vietnam, stated that many soldiers who used the drug were "amotivational" and that legalization could result in more potent forms of cannabis being imported into the country.

Finally, a study by Lemberger et al of the National Institute of Mental Health indicates that ▲9-tetrahydrocannabinol, the major active component of marihuana, when administered intravenously to normal volunteers persists in the plasma for more than three days ($t^{1/2} = 56$ hours). Its metabolites appear in plasma within ten minutes after administration, but persist along with the precursor compound. Radioactive metabolites of the active component are excreted in the urine and feces for more than eight days. The implications of these findings in regard to the persistence of effects of the drug are ominous. It would appear that a subject smoking pot two or three times a week probably never wholly gets out from under the effects.

These reports from varied and reliable sources, which examine marihuana without the moonlight and roses, hardly allay the serious doubts prevalent among responsible observers of the current scene.

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THE RHODE ISLAND MEDICAL SOCIETY AND THE FOUNDATION CONCEPT

At the January 1972 meeting of the House of Delegates of the Rhode Island Medical Society, a resolution was passed authorizing serious exploration of sponsorship by the Society of a foundation type of organization. In this connection the remarks of Doctor Joseph E. Caruolo, incoming President of the Providence Medical Association, delivered at its 125th Annual Meeting, are pertinent:

To have the incoming president speak at all is a break with tradition. We feel that the tempo of our times requires not only commentary by our past president, but also a word about one of the goals of the new president.

It is my hope and plan that during the coming year the Providence Medical Association and the Rhode Island Medical Society will approve of an innovation in the delivery of medical care as provided by the private sector and that before the year is over that we shall have begun implementation of that innovation. What I propose is the

establishment of a Foundation of Medical Care designed to function as a Health Maintenance Organization, working closely with the Blue Shield and Blue Cross Corporations of Rhode Island. I am confident of your support since organized medicine has already approved of the several experiments in the delivery of medical care now already under way in this state.

It would not be appropriate for me to speak at length on this subject tonight. Suffice to say that this Foundation will function not at all as an antagonist to fee-for-service private practice or as an antagonist to the several private and non-private group efforts. It will enter into the field of the delivery of medical care in full cooperation with these groups, all acting in concert "to improve the health of the health care delivery system in Rhode Island." In my opinion, an open market in which the consumer has complete freedom of choice is the only system that can possibly serve our health needs for many, many years to come and quite likely for the forseeable future.

PATHOGENESIS OF AMYLOIDOSIS

The sporadic occurence of amyloidosis in chronic diseases is a well-known phenomenon since it was first identified by Rokitansky over a century ago. Osler noted its occurence in long-standing suppuration of the lungs and bone, and associated it most commonly with tuberculosis and syphilis. That it occurs also in multiple myeloma and rheumatoid arthritis might have suggested an immunological relationship.

Until very recently, however, the nature of its pathogensis has proved elusive. G. C. Glenner and associates of the NIH have finally succeeded in purifying the characteristic protein fibrils of amyloid material from heart, kidneys, liver, and spleen. They have identified the protein deposits as derived from portions of immunoglobulin molecules known as "light chains." The highly purified amyloid fibrils came from livers and spleens that had been 80 to 90 per cent replaced by amyloid matter. They were able to demonstrate that these light chains are strongly resistant to the normal enzymatic systems for degrading proteins.

While amyloid specimens from different organs in the same patient are identical, they vary in

specificity from one individual to another.

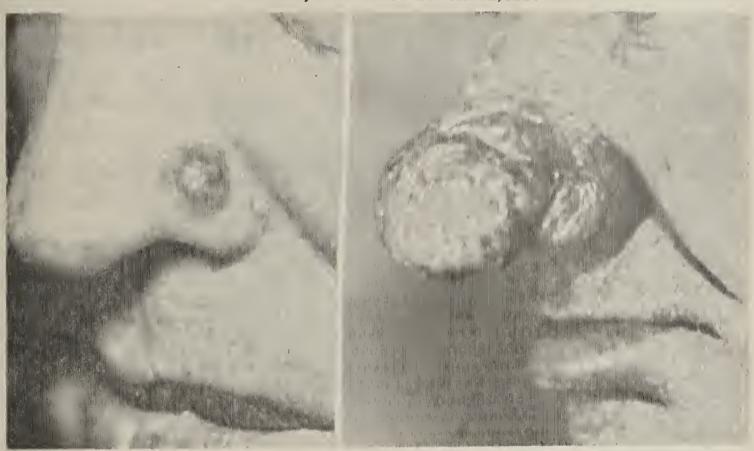
In patients with chronic disease the presence of an antigen stimulates the formation of immunoglobulin antibody. These molecules are fashioned in sections by plasma cells and are eventually assembled into whole antibodies. During this process in certain chronic diseases, an excess of light chains is synthesized which is never incorporated into active molecules. These excess fragments enter lysosomes where they are degraded to insoluble aggregates and there discharged into the tissues where they remain as a deposit.

Glenner was able to reproduce this process in vitro by creating amyloid fibrils in the laboratory and there degrading them under simulated conditions to classical amyloid tissue exhibiting a crystalline configuration on x-ray diffraction exactly paralleling the natural substance.

While this historic advance in the understanding of amyloid disease does not signify a therapeutic break-through, it may well lead to that ultimate eventuality and in the meantime will provide a better understanding of the immunological process.

DERMAQUIZ

Conducted by FRANCESCO RONCHESE, M.D.



At left, a nodule, yellowish, indolent, with enlarged capillaries, of 3 years duration.

At right, a spongy nose red with open follicles exuding sebum, of several years duration.

Answer on Page 58

Book Reviews

BODY LANGUAGE, by Julius Fast. Philadelphia and New York, J. B. Lippincott, 1970.

Charlie Chaplin's genius was his ability to communicate emotions without the use of vocalization. Every plastic and graphic artist must be able by the use of "body language" to convey the emotion of his subject — the portrait painter by facial expressions, the sculptor by postures. We can recognize in sculpture, by body posture, the heroic conquering hero, or the dejected, rejected, downtrodden piece of humanity. Hogarth's greatness was this understanding of "body language" and "facial expression". Simultaneous with the publication of Fast's Body Language was a reprinting of the Lichtenburg Commentaries on Hogarth. Lichtenburg analyzed the Hogarth engravings and calls the observer's and reader's attention to the nuances and the effects achieved by Hogarth depictions. Julius Fast in his popularly written book has described some of the contemporary scientific approaches to the non-vocal signalling between humans by changes in facial expression or by bodily gestures, postures, and gesticulations

The generic name for this "new science" of body language is called "kinesics", but it's not new; Darwin in 1872 in his paper, "The Expression of the Emotions in Man and Animals" pioneered in the study of non-verbal communication. Darwin showed that much of our communication is expressed and understood as unlearned, instinctual behavior. Some expressions are universal, others are culturally determined. A smile is correctly interpreted as a smile by every culture or subculture ever studied; but assent or dissent indicate by nodding or shaking the head are clearly culturally determined. In this study of body language and instinctual behavior, psychologists first have had to delineate between the two.

The "territorial imperative" concept hit upon by Ardrey is shown in *Body Language* to be instinctual for humans as well, refined by contemporary studies. "Territorial imperative" is akin (Continued on next page)

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ONE SOURCE / TOTAL INSURANCE

to the developing new subject of "Proxemics", a field begun by Edward T. Hall, Professor of Anthropology at Northwestern University. divides man's territorial needs into four distinct zones: 1) intimate distance, 2) personal distance, 3) social distance, and 4) public distance. The intimate zone extends from actual contact to a distance of approximately 18 inches. Intrusion on this zone is permitted only for lovemaking, the cuddling of children, or for the association of extremely close friends. Violation of this intimate zone will raise conflict between individuals if the intimacy is culturally tabooed. There are cultures where such intimate contact is permitted, for example, between Arab men or, in Western culture, by women. When crowding occurs such as in subways, invasion of this personal, intimate zone calls for an apology, or some form of signalling to indicate a negation of the usual intimate relationship suggested.

The second zone of territory known as the personal distance zone is approximately two-and-a-half feet. It is the usual distance at cocktail parties, and allows a certain feeling of intimacy which is socially correct. Except under such circumstances as cocktail parties, moving into a person's personal distance zone signals to the persons involved, and to observers, that a close interpersonal relationship has been established. Members of the opposite sex do not move within this zone without giving prima facie evidence of intimacy.

Social distance has a close and a far phase; the close phase is four to seven feet. This distance we usually use to transact impersonal business. The housewife keeps the repair man, the shop clerk, and the delivery boy there; it is the distance one assumes at a casual social gathering. At the far phase of the social distance, approximately 12 feet, begin the more formal social and business relationships. It is an impersonal distance. To make it personal the parties concerned must look at each other during their conversation. Conversely, it is perfectly proper and usual at this distance not to give attention, except briefly, and to revert to one's own interest. It is a distance usually assumed in the interpersonal relationships in the home at other than intimate periods.

Public distance is the limit of our territorial prerogative. Close public distance, between 12 and 25 feet, usually is chosen for informal gatherings—the teacher in a classroom, or a speaker at a conference of workers. The far phase of public

distance is that for formal addresses; it is the common distance of the podium from an audience in church or lecture hall. Of more than coincidental or chance interest, it is the distance that most animal species regardless of size will allow a human to approach before moving away. Refinements and ramifications of interpersonal relationships within these various territorial prerogatives and zones is significant, provoking, and enlightening.

Silent signalling by posturing, eye movements, stance, and by many refinements and ramifications are described in a popular way in this book. They are discussed in innumerable situations as they arise in life, and specifically as regards mating. Non-verbal communication between homosexuals is an example of special cases. This stylized behavior is almost a paradigm in non-verbal communication.

This book is written in a very light, reportorial manner. It is an amusing survey of some things going on in anthropology, ethnology, sociology, and psychology. All of us use a surprising amount of non-verbal signalling, day in and day out. The more gifted in society are able to *project* with it; they become our great actors and actresses; others are superbly gifted in reading it, as the great trial lawyers who can actually poll a jury by carefully observing their non-verbal responses and communications. "Body language" is so much a part of all of us that, although very lightly written and a bit crass at times, it can prove to be a delightful diversion and arouses much reflection and curiosity.

* * *

ROBERT V. LEWIS, M.D.

CRISIS by David E. Fisher. Garden City, New York, Doubleday & Company, Inc., 1971, \$5.95.

If this book was actually written by an inmate of a hospital for the criminally insane, it would be of value. But it is fiction and becomes only obscene and gruesome.

It is the story of the mental collapse of Barney Ferber, who has a Ph.D. in English literature and a Professorship in New York University. About half of it describes his sexual experiences in detail. The other half is concerned with his four murders which are indeed senseless and ugly. It does not seem clinically authentic to me.

A book should be either instructive, interesting, amusing, or well-done. This one is only depressing.

H. G. CALDER, M.D.

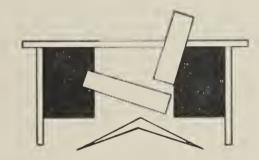
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Peripatetics

ARTHUR KERN was elected President of the Rhode Island Dermatological Society at a recent meeting. LOUIS A. FRAGOLA, JR. was elected Secretary-Treasurer.

* * *

The following physicians have been given staff appointments at the Rhode Island Hospital: Active Staff — THEODORE HERSCH, Associate Director of the Division of Gastroenterology, Medicine; EARL T. ANDERSON, Medicine; SIDNEY FINK, Associate Director, Ambulatory and Community Medicine, Medicine; H. DENMAN SCOTT, Ambulatory and Community Medicine; GEORGE N. COOPER, Surgery; ROBERT V. STEPHENS, Surgery; ALAIN SHOUPING WU, Anesthesiology; JOSEPH P. BELLINO, Otolaryngology; DOMINIC C. PETRONIO, Pediatrics; STEPHEN J. KAMIONEK, Orthopedic Surgery and Fractures.

- Courtesy Staff — YOUSSEF HABIB GEORGY, Medicine; and ANDRE H. ZALZA, Gynecology.

* * *

The Rhode Island Otolaryngological Society has re-elected the following officers: RUDOLPH W.

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PEARSON, president; THOMAS R. LITTLE-TON, vice-president; and MARY D. LEKAS, secretary-treasurer.

* * *

JOHN T. BARRETT has been appointed physician in-chief of the Department of Pediatrics at Rhode Island. Doctor Barrett is also chief of pediatrics at the Providence Lying-In Hospital.

* * *

Under the sponsorhip of the American College of Surgeons a Committee on Trauma for the State of Rhode Island has recently been formed.

FRANCO ERCULEI has been appointed Chairman; JESSE P. EDDY, 3rd, Vice-Chairman, and WILLIAM F. GARRAHAN, Secretary-Treasurer.

Other active members are: ERMINIO CARDI, MARTIN E. FELDER, CHARLES L. HOPPER, ANTHONY F. MERLINO, ROBERT W. RIEMER, LEONARD S. STAUDINGER, JOHN R. STUART, ARMAND D. VERSACI.

The associate members are: JOSEPH J. DEL-FINO, JOHN A. ELLIOT, GILBERT HOUSTON, ALTON M. PAULL, ROBERT L. PETERS.

The advisory members are: Col. Walter A. Mc-Queeney, Chief of Providence Police; John F. McDonald, Assistant Chief of Rescue Squad; Col. Edgar Bailey, Wing Commander of the Civil Air Patrol; Mr. Edward McKenna of the Registry of Motor Vehicles, and Mr. John P. Lynch, Insurance Agent.

* * *

MANUEL L. DaSILVA has written a book detailing Portuguese exploration in early America. Doctor DaSilva's book entitled "Portuguese Pilgrims and Dighton Rock", claims the Portuguese and not Christopher Columbus were the first to discover the continent.

* * *

FRANK MERLINO has been elected President of the Medical Staff at Rhode Island Hospital. Other officers electted were: LOUIS A. LEONE, President-elect; HERBERT FANGER, Vice President; THOMAS C. McOSKER, Treasurer; executive committee for two years, JULIUS STOLL and FRANCIS L. McNELIS and executive committee for a one year term, JOHN T. BARRETT.

(Concluded on Page 55)

PERIPATETICS

(Concluded from Page 54)

New staff appointments at Rhode Island Hospital are: active staff — ROGER W. ASHLEY, pediatric; GRAHAM J. NEWSTEAD, pediatrics; PATRICIA A. ROMPF, Division of Pediatric Cardiology and pediatrics; SHELDON D. KAPLAN, medicine; consulting staff, STANLEY ARONSON, pathology, and BENJAMIN FEATHER, psychiatry.

* * *

ALLAN A. DISIMONE has been named Associate Chief of Surgery for Our Lady of Fatima Unit and ERMINIO CARDI has been named Associate Chief of Surgery for the Our Lady of Providence Unit of St. Joseph's Hospital Department of Surgery. Serving on the new Senior Policy Committee are FRANCIS P. CATANZARO, chairman; GEORGE V. COLEMAN, FRANCIS W. NEVITT and DOCTORS CARDI and DiSIMONE.

* * *

RICHARD W. PERRY of Warwick has been granted Fellowship in the American College of Cardiology.

70 70 70

J. D. KEITH PALMER has been appointed

director of the Division of Physical and Rehabilitation Medicine at The Miriam Hospital.

* * *

The following Rhode Island physicians have been inducted as Fellows of the American College of Surgeons; KENNETH G. KNOWLES of Cranston; ABALLA G. ABADIER, Pawtucket, and CHARLES L. HILL and FRANCIS L. McNELIS, both of Providence.

* * *

At a recent meeting of the Rhode Island Society of Pathologists, Inc. the following officers were elected for the coming year: President — ALBERT E. KALDERON, Associate Pathologist at Roger Williams Hospital; Secretary-Treasurer — PATRICK A. BRODERICK, Associate Pathologist at St. Joseph's Hospital; and Immediate Past President — WILLIAM FETHIERE, of Roger Williams General Hospital.

* * *

ARTHUR E. MARTIN, medical director of the Dr. John E. Donley Rehabilitation Center was the recipient of the Ben Fish Award from the Rhode Island Division of Vocational Rehabilitation. The citation is for "outstanding dedication to the rehabilitation of physically disabled persons".

* * *



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AMA HOUSE OF DELEGATES REPORT

(Concluded from Page 30) amendments, clearing the way for final action in the annual meeting in June, 1972.

NON-MEMBER PARTICIPATION

The House amended the Bylaws to permit those physicians who are not members of the AMA to participate in AMA scientific programs as "invited guests". The recommendation came from the Board of Trustees, which said the programs should be available to all members of the profession. The Board report said "non-member physicians, eminent persons from foreign countries, and residents of the United States who are not engaged in the practice of medicine" may be invited to participate.

DUES FOR INTERNS AND RESIDENTS

The House established annual dues of \$20 for interns and residents as members of the AMA. The amount was calculated "solely to cover some of the costs of the benefits of membership," such as receiving AMA publications. Interns and residents currently may join the AMA in two ways: Through active membership in a state association or, where there are no provisions for such membership, by direct application to the AMA. In either case, they must pay the \$20 AMA dues.

PHYSICIAN'S ASSISTANTS

Several major actions were taken in regard to the rapidly developing field of physicians' assistants.

The House directed that the AMA, through its Council on Health Manpower, "assume a leadership role in developing and sponsoring a national program for certification of the assistant to the primary care physician, who functions at the highest level of responsibility described by the National Academy of Sciences as a 'Type A' assistant."

Delegates also adopted a report of the Council on Medical Education, outlining essential requirements for AMA approval of educational programs for such assistants. The essentials were developed in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians and the American Society of Internal Medicine.

Essentials of an approved educational program for urologic physician's assistants, outlined in another Council report, went back to the Council for further study.

The House directed the Board of Trustees to develop guidelines on compensation of physicians for the services of their assistants, and to report back to the House next June.

HOSPITAL COSTS-EDUCATION FACTORS

The rising costs of hospital care, and those cost factors attributable to hospital-based education programs, also drew House attention and action. Delegates adopted a resolution which reiterated AMA concern about increasing costs and pledged AMA efforts to achieve cost control, and added:

"Resolved, that the Board of Trustees be urged to assign to appropriate councils and committees the responsibility to conduct a detailed study of the costs of hospital services to identify (1) the multiple factors involved; (2) the elements that have the greatest impact on the rise in hospital costs; (3) the various cost factors attributable to hospital-based medical and allied health education programs; (4) the alternative mechanisms to finance the costs of such educational programs including the possibility of reducing or eliminating charges to patients that are attributable to such programs; (5) the degree of impact, if any, that federally funded health programs have on these hospital costs."

The resolution called for the study to be conducted in consultation with the American Hospital Association, private and governmental payment agencies, and representatives of the public. Periodic progress reports, to be submitted at each session of the House of Delegates until completion of the study, also were requested.

MISCELLANEOUS

Immediate action to improve the quality of emergency medical services in the United States was urged in a Board of Trustees report adopted by the House. The report said:

"Those medical societies that have not already done so are urged to establish councils on emergency medical services or to assign that subject area to an appropriate existing council, whose responsibility should include developing action-programs in emergency medical services to meet their area's needs and maintaining liaison with groups at all levels of organized medicine concerned with emergency medical services."

Small communities without necessary resources to develop their own systems "should consider linking together with surrounding communities to form a regional system." Skilled personnel and high quality equipment and facilities should be provided, the report said, and the medical pro-

fession should see to it that quality of service is periodically evaluated. The report also recommended a single agency at the federal level with responsibility for all governmental efforts to improve emergency medical services.

A revised statement on the scope, objectives annd functions of occupational health programs also was adopted by the House. The statement, among other things, said "some employes on occasion may find it impossible to locate or to obtain the services of a personal physician or health service. In such circumstances, limited to where treatment is otherwise unavailable, the occupational physician may undertake additional and continuing treatment of an employe's nonoccupational condition if requested to do so by the employe or his family."

The statement added that if such services become ongoing within the occupational health program, approval of the employer should be obtained. "In order to assure high quality medical care, consideration and approval by the local medical society in developing such projects, including the methods of payment for services is urged."

The House adopted a study on Community Health Delivery Programs and urged it be given wide distribution. The study, by a task force of the Committee on Community Health Care, described funding, scope of operations and staffing of 30 programs around the nation.

Physicians should be active, the report recommended, in a number of areas including: participating in planning and operation of community health programs; using all means at their disposal to ensure that all people are afforded equal access to adequate medical and health care; supporting campaigns against factors harmful to health such as lead poisoning, drug abuse and poor housing; and supporting health education programs in schools, homes and the mass media. The federal government should be urged to consolidate all federal health programs under one department and to provide long-range approval and multiple-year funding — rather than annual funding — to help retain top staff, the report said.

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ONE SENTENCE ESSAY

It is the right of every patient to have access to medical care, but it is his responsibility to seek it.

... Los Angeles County Medical Society policy statement On the Right to Medical Care.

DISTRICT MEDICAL SOCIETY MEETINGS

(Concluded from Page 32)

Doctor Zamcheck then gave an impressive pertinent history covering the entire field of the utilization of various types of immunoassays in the field of Oncology. Following this he gave in detail the developments in the field of immunoassay of Carcinoembryonic antigen CEA) in the Diagnosis of Cancer of the Colon and Pancreas. During the course of this lecture he gave comparisons with the experimental work in Montreal and throughout the scientific world. Doctor Zamcheck closed the formal portion of his presentation with a most enlightening discussion concerning the present status of the importance of this knowledge as a diagnostic and prognostic tool as well as potential future development in the immunoassay field.

The attendance was 68. Of these, 58 attended the dinner part of the meeting and 10 arrived later for the scientific portion of the meeting. Again it is to be stressed that all members are invited free to the scientific portions of such meetings in the future.

ADJOURNMENT

The meeting was adjourned at 10:20 p.m. Respectfully submitted:

THOMAS F. HEAD, M.D. Secretary

Attendance 68

å å å

ONE SENTENCE ESSAY

You cannot socialize the doctor without socializing the patient.

. . . Governor Ronald Reagan of California.

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SURGICAL RESECTION OF ANEURYSM

(Concluded from Page 48)

tive excision of aneurysms of the abdominal aorta when there is no major medical contradiction.

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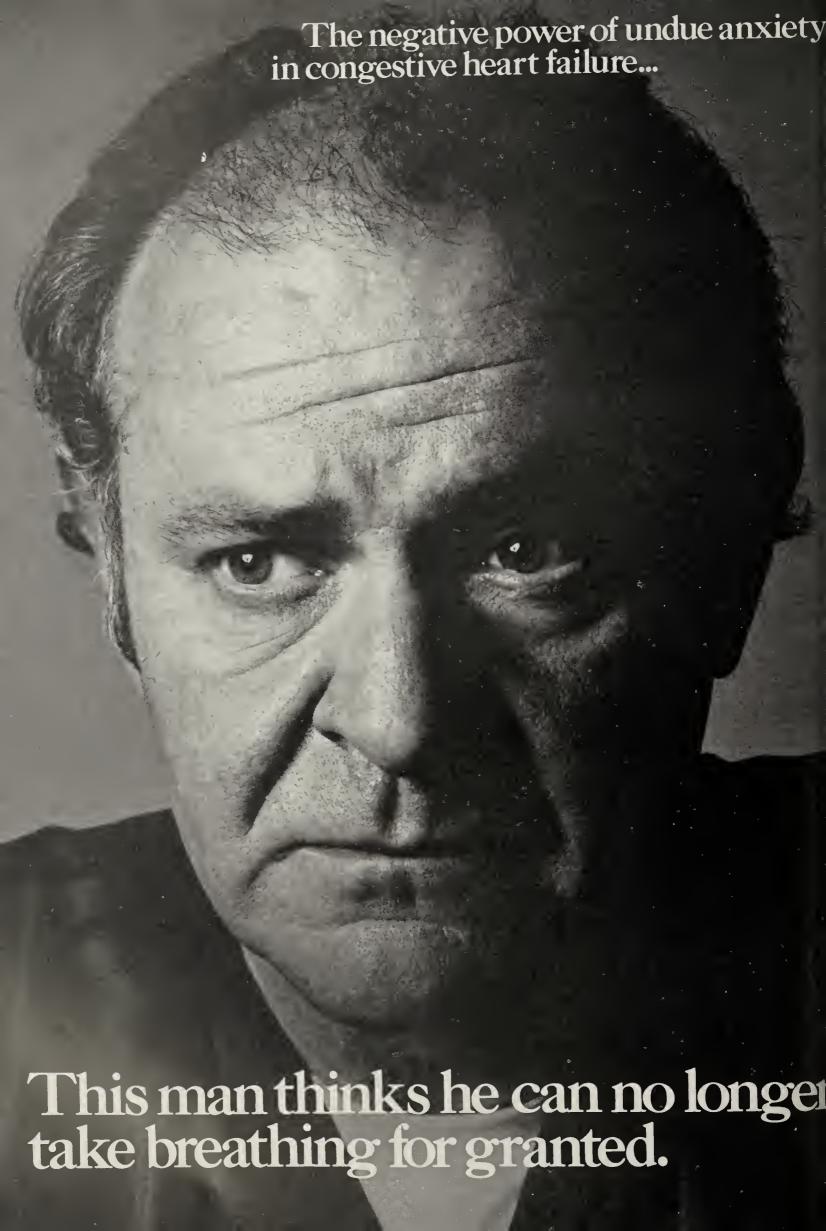
DERMAQUIZ ANSWER

(See Page 51)

Left, basal cell carcinoma.

Right, rhinophyma.





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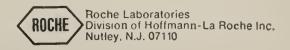
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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Preeautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including arrangle stress) ing agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



Rhode Island Medical Journal

MARCH, 1972

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VOLUME 55, No. 3

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House Of Delegates Of The Rhode Island Medical Society

Report Of The Meeting Of January 19, 1972

A meeting of the House of Delegates of the Rhode Island Medical Society was held at the Medical Library, Providence, Rhode Island, on Wednesday, January 19, 1972. The meeting was called to order by the Speaker of the House, Dr. John J. Cunningham, at 3 p.m.

Members in the House in attendance were: Drs. John J. Cunningham, John C. Ham, Carl V. Anderson, Robert E. Baute, William J. O'Rourke, John C. Osenkowski, Charles B. Round, Joseph E. Wittig, Charles S. Dotterer, Frederick Peirce, Jr., Richard G. Bertini, Eugene Gaudet, Earl J. Mara, Mary-Elaine Rohr, James A. McGrath, William J. MacDonald, Richard Kraemer, Robert V. Lewis, Stephen J. Hoye, John P. Grady Richard P. Sexton, John T. Barrett, Joseph E. Caruolo, Nathan Chaset, George V. Coleman, Dominic L. Coppolino, John A. Dillon, Joseph D. Di Mase, Joseph L. Dowling, Jr., Martin E. Felder, Donald P. Fitzpatrick, David Freedman, Edward J. Gauthier, Constantine S. Georas, Frank Giunta, Herbert F. Hager, Thomas F. Head, Abraham Horvitz, Henry M. Litchman, Thomas R. Littleton, Vincent I. MacAndrew, Peter Mathieu, Raul Nodarse, Ralph F. Pike, James A. Reeves, Robert P. Sarni, George H. Taft, Wilson F. Utter, Armand D. Versaci, Elihu S. Wing, Jr., Joseph E. Cannon, Seebert J. Goldowsky, Edmund T. Hackman, and William R. Thompson.

Also present were Messrs. Charles P. Williamson and John Reid, legal counsels, John E. Farrell, Executive Secretary, Edward J. Lynch, Assistant Executive Secretary. Dr. Hugo Taussig, Chairman of the Mental Health Committee, and Dr. Earle F. Cchen.

Members of the House absent were: Drs. David

Newhall, Rudolf A. Jaworski, A. John Elliot, Joseph L. C. Ruisi, Francis L. Scarpaci, Leonard S. Staudinger, J. Gerald Lamoureux, Bertram H. Buxton, Jr., Joseph A. DeBellis, Herbert Ebner, Alvin G. Gendreau, Milton W. Hamolsky, John B. Lawlor, and Arnold Porter.

MINUTES OF PREVIOUS MEETING

Action: A motion was made, seconded and voted that the minutes of the meeting of the House of Delegates held on September 22, 1971, as published, be approved.

REPORT OF THE SECRETARY

Dr. Stephen J. Hoye, Secretary, noted that his report was included in the handbook for the meeting. The following items were discussed:

Item 24. Dr. John P. Grady discussed the federal price freeze and expressed the opinion that members of the Society should file fee profiles for this minimum fee at least since it is probable that the increment will not be cumulative. Several members of the House discussed the issue.

Item 15. Optometry Legislation.

Dr. Charles S. Dotterer outlined the reasons why the ophthalmologists of the State had opposed this legislation and with the aid of the State Medical Society, had sought to have the Assembly table it. However, he pointed out that the legislation had been enacted in 1971. He pointed out the dangers to the eye health of the public that are inherent the provisions of the legislation.

Dr. Joseph E. Cannon, State Director of Health, informed the House that his

(Continued on next page)

Department had opposed the legislation, and that it now finds that it is unable to carry out the provisions of the law under the terms in which it is set forth. He stated his opinion on this decision would be made in writing to the Society in the immediate future, and that subsequently legal action would probably result to clarify the entire issue.

Dr. Joseph Dowling reported on the support that has been forthcoming from other parts of the country from physi-

Doctor Dowling reported on the plans of the R. I. Ophthalmological Society to seek to determine the constitutionality of the legislation, and he urged that the State Medical Society give its support to the task.

Action: A motion was made that a letter be directed by the Society to the members of the General Assembly reaffirming the Society's strong opposition to the optometric legislation passed in 1971, as not being in the best interests of the public, and that the diffifulties in implementing the legislation, as indicated by Doctor Cannon, be cited also. The motion was seconded and voted.

Health Planning Council Study. Item 11.

Doctor MacDonald noted that this item should be corrected to read that a study "is being planned" rather than "was being undertaken."

Action: A motion was made, seconded, and voted that the report of the Secretary, as a whole, and as amended, be approved and placed on record.

REPORT OF THE TREASURER

Dr. John P. Grady, Treasurer, noted that a detailed report of the financial status of the Society, including a 1971 resume, was included in the handbook for the meeting, and was self-explanatory. Action: A motion was made, seconded and voted that the report of the Treasurer, as submitted, be approved and placed on file.

SPECIAL COMMITTEE ON DELIVERY OF MEDICAL CARE

Dr. Joseph E. Caruolo, Chairman of the Committee on the Delivery of Medical Care, discussed the work of his Committee, and noted that at the September meeting of the House suggested legislation for a Medical Foundation had been presented. He asked that legal counsel address the House on the matter.

(Continued on Page 64)

Pre-Sate®

(chlorphentermine HCl)

CAUTION: Federal law prohibits dispensing without

Indications: Pre-Sate (chlorphentermine hydrochlo-

ride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

ride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction. Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal. Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnanc

is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of Insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlor-phentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses, Cardiovascular: tachycardia, palpitation, elevation of blood pressure.

Gastrointestinal: nausea and vomiting, diarrhea, unpleasant taste, constipation. Endocrine: changes in libido, impotence. Autonomic: dryness of mouth, sweating, mydriasis. Allergic: urticaria. Genitourinary: diuresis and, rarely, difficulty in initiating micturition. Others: Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be consioered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

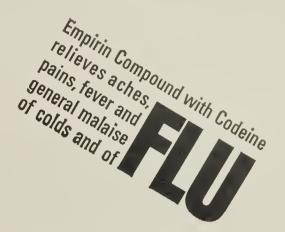
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Plan To Attend

TRAUMA SYMPOSIUM TUFTS SURGICAL SERVICE - BOSTON CITY HOSPITAL

	Y, APRIL 20, 1972	FRIDA	AY, APRIL 21, 1972
A.M.		A.M.	
DI Di	PENING COMMENTS R. HARRY S. SOROFF rector, Tufts Surgical Service, oston City Hospital, Boston		Prevention and Management of Pul- monary Insufficiency in the Trauma- Patient DR. ERWIN F. HIRSCH
8:30- 9:00 Ini DI Te	itial Care of the Trauma Patient R. CHARLES R. BAXTER, Dallas, xas	9:00- 9.30	When to Operate on the Patient Who Sustained Blunt Abdominal Trauma
Pa DF	esuscitation of the Severely Injured tient R. LARRY C. CAREY, Pittsburgh,	9:30-10:00	DR. LESTER F. WILLIAMS Surgical Alternatives in Hepatic Trauma
9:30-10:00 Th	e Role of Angiography in Trauma R. CHRISTOS ATHANASOULIS,	10:30-11:00	DR. WILLIAM V. McDERMOTT, JR. Injuries to the Pancreas and the Duodenum DR. JOHN J. BYRNE
G		11:00-11.30	Injuries to the Colon DR. CHARLES A. BUERK
Se DF	itial Care and Management of the everely Burned Patient R. BASIL A. PRUITT, JR., Houston,	11:30-12:00	Management of Urological Injuries DR. ROBERT M. SCHLESINGER
11:30-12:30Ro	ound Table on the Morning Session	12:00-12:30	DISCUSSION—The subjects covered in the morning session
P.M.	R. HARRY S. SOROFF	12:30- 1:30	LUNCH-House Officers' Mezzanine
	JNCH—House Officers' Mezzanine	1:30- 2:00	Upper Gastro-Intestinal Hemorrhage Following Stress and Trauma
1:30- 2:00 At DF	hiefic Injuries R. THOMAS B. QUIGLEY	2:00- 2:30	DR. LON E. CURTIS Nutritional Management of the
2:00- 2:30Or DF	thopedic Trauma R. HENRY H. BANKS		Trauma Patient DR. HARRY S. SOROFF
2:30- 3:00Ne		2:30- 3:00	Sepsis, a Complication of Trauma DR. GEORGE H. CLOWES, JR.
3:30- 4:00Ma		3:00- 3:30	General Principles of Antibiotic Therapy in the Trauma Patient — Mallory Institute
4:00- 4:30 RC	DUND TABLE	3:00- 4:00	DISCUSSION

HOUSE OF DELEGATES REPORT

(Continued from Page 62)

Mr. Charles P. Williamson, legal counsel, stated that the Society had two choices; 1) seek enabling legislation through the General Assembly for a Medical Foundation; or 2) incorporate a Foundation as a non-profit organization by filing with the Secretary of State and subsequently seeking tax exemption from the Internal Revenue Service.

He favored the second approach at this time, since it is not yet clear to what extent the medical profession is prepared to engage in a complete delivery system under its own auspices. He expressed the belief that a non-profit organization might well be incorporated, and then, based on the findings of the study committee, move forward in whatever direction the Society deems advisable.

He requested that the House consider authorizing legal counsel to proceed with its preparation of how a non-profit business corporation might be established to meet the requirements of the Committee, and that then report back to the House in March on its findings.

Action: A motion was made, seconded and voted that legal counsel proceed on the basis as presented by Mr. Williamson, and that the matter be reported to the House at its next meeting.

BENEVOLENCE FUND

The Speaker noted that the Trustees of the Benevolence Fund had filed their 1971 financial report for the information of the House.

Action: A motion was made, seconded and voted that the report of the Benevolence Fund be received and placed on file.

RECOMMENDATIONS OF THE COUNCIL

Doctor Hoye read the recommendations from the Council, as published in the handbook for the meeting. Action was taken as follows:

1. March Meeting of the House

Contined on Page 66)

IN ASTHMA IN EMPHYSEMA





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HOUSE OF DELEGATES REPORT

(Continued on Page 64)

A motion was made, seconded and voted that the recommendation be adopted.

2. Nominees as Directors of Physicians Service
The Secretary reported that Dr. Seebert
J. Goldowsky, a member of the Board whose
term expires in 1974, had resigned because
he is assuming the position of Medical Advisor to the Plan. Therefore, the House
would also have to nominate for that vacancy.

Action: A motion was made, seconded and voted that Doctor Goldowsky be congratulated for his long and efficient service as a member of the Board of Directors.

Action: Dr. Thomas Head was nominated to fill the vacancy created by Doctor Goldowsky's resignation.

Dr. John J. Cunningham was nominated, and he asked that his name be withdrawn.

Nominations were closed, and Doctor Head was declared the nominee to serve from January 19, 1972 until his successor shall be duly elected and qualified. *Action*: A motion was made, seconded and voted that Drs. Edmund T. Hackman, Frederick A. Peirce, Arnold Porter, and Stanley D. Simon be renominated for three year terms each as members of the Board of Directors of Physicians Service.

3. Court Suit on Optometric Legislation
Action: A motion was made and seconded that the House approve the recommendation of the R. I. Ophthalmological Society in its attempts to seek court action to determine the constitutionality of the optometric legislation enacted by the 1971 R. I. General Assembly, and that the members of the Society be assessed \$5 each to support the legal costs of the action.

A motion to table the action until the March meeting of the House was not seconded.

A motion was made to amend the motion to support the action to determine the constitutionality of the law, but to delay the matter of membership assessment until more information is available. The motion was seconded, and defeated.

The original motion was voted.

(Continued on Page 67)

HOUSE OF DELEGATES REPORT

(Continued from Page 66)

PROFESSIONAL ADVISORY COMMITTEE OF PHYSICIANS SERVICE

The Speaker noted that the House was called upon to elect three physicians to serve on the Professional Advisory Committee of Physicians Service. The provisions for such action were set forth in the handbook for the meeting.

Action: A motion was made, seconded and voted that Drs. J. Robert Bowen, John F. W. Gilman, and John P. Grady be elected to serve on the Professional Advisory Committee of Physicians Service for 1972.

RESOLUTION FROM MENTAL HEALTH COMMITTEE

The Speaker called for action on the resolution submitted to the House by the Mental Health Committee, and included in the handbook of the meeting.

The resolution was discussed by Drs. Coppolino and Taussig.

Action: A motion was made, seconded and voted that the resolution, as submitted, from the Mental Health Committee be adopted.

RESOLUTION SUBMITTED BY DR. HENRY LITCHMAN

A resolution was submitted in writing to the House by Dr. Henry M. Litchman, as follows:

In view of the fact that there appears to be great confusion concerning benefits of Medicare and Medicaid patients in extended care facilities and Nursing Homes in Rhode Island, I would move that a special meeting be held to which representatives of Blue Cross, the Travelers Insurance Company and the representatives of the Social Security Agency for this District, as well as a representative of the State Welfare Department would present the current regulations concerning benefits that these patients are entitled to and how the doctor can ensure that our patients do receive these benefits.

The resolution was discussed by Drs. Litchman and Kraemer.

Action: A motion was made, seconded and voted that the resolution, as submitted, be adopted.

REPORT OF THE DELEGATE TO THE AMA

Dr. Edmund T. Hackman, delegate to the American Medical Association, gave an oral report of the highlights of the clinical session held in New Orleans in December, 1971. He reported on the

(Continued on Page 90)

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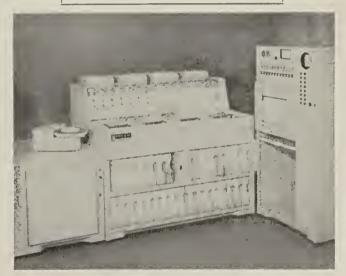
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Peripatetics

The Warwick Business and Professional Women's Club has honored JEANNETTE E. VIDAL as "Woman of the Year".

* * *

The St. Joseph's Hospital Medical Staff Association recently honored 59 physicians who have actively served the hospital for periods ranging from 30 to 50 years. Honored for 50 years of service at St. Joseph's was WILLIAM A. HORAN, who joined the hospital's Medical Staff in 1921 and remains an active Staff Member. Doctor Horan is a past president of the Staff Association and served for many years as St. Joseph's Chief of Orthopedics.

Certificates expressing the appreciation of the Staff and the hospital's Board of Trustees were presented to the following physicians with 40 or more years of service at St. Joseph's: ANGELO ARCHETTO, JAMES H. BARTLEY, JOHN R. BERNARDO, BENEDICT CHAPAS, JOHN J. DONAHUE, JOSEPH L. DOWLING, SR., STANLEY S. FREEDMAN, WILLIAM A. HORAN, ALBERT H. JACKVONY, JOSEPH C. JOHNSTON, FEDELE U. LUONGO, ALPHONSE W. LUPOLI, MICHAEL J. O'CON-

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Also participating in the ceremonies were LE-LAND W. JONES, President of the Staff Association; JULIUS C. MIGLIORI and RALPH F. PIKE, co-presidents of the Staff Association for 1970-71; ROBERT P. SARNI, President-elect; and ANACLETO BERRILLO, Chairman of the Appreciation Day program. Other officers of the Staff Association are NICHOLAS A. POURNARAS, Treasurer and ROCCO MARZILLI, Secretary.

A feature of the program was the installation of Doctor Jones as the first Association President since the recent joining of the medical staffs of St. Joseph's and Our Lady of Fatima Hospitals. Participants in the Appreciation Program were HENRY S. M. UHL, the hospital's Director of Professional Affairs; and JOHN P. GRADY, toastmaster, who presented a citation to GEORGE E. CHARON whose father, Ernest A. Charon, is believed to be the first intern who served on St. Joseph's Hospital.

Certificates of appreciation were also presented to the following physicians with 30-40 years of service on the hospital's Medical Staff: C. THOMAS ANGELONE, MICHAEL ARCIERO, D. RICHARD BARONIAN, EZIO J. BERNAS-CONI, ANACLETO BERRILLO, EDWARD BROWN, JAMES H. COX, AMERICA DEL SELVA, PALMINO DI PIPPO, JOHN J. DON-NELLY, CHARLES P. EARLEY, THOMAS A. EGAN, JAMES J. FLANAGAN, STEPHEN J. FORTUNATO, FRANK D. FRATANTUONO, ANTHONY A. IAVAZZO, PASQUALE V. IN-DEGLIA, FRANK C. JADOSZ, GEORGE E. KIRK, A. BUDNER LEWIS, ALEXANDER F. MARZILLI, BENJAMIN S. McKENDALL, WALTER J. MOLONY, JOHN C. MYRICK, O'CONNELL, THOMAS L. EDWIN O'REILLY, NICHOLAS A. POURNARAS, GUS-TAVE L. POZZI, EDWARD R. RICCI, FRED-ERICK R. RILEY, VINCENT P. ROSSIGNOLI, JOHN C. SARAFIAN, WILLIAM J. SCHWAB, CIRO O. SCOTTI, JOHN J. SHEEHAN, H. FREDERICK STEPHENS, JOHN F. STRE-KER, EDMUND J. SYDLOWSKI, FRANCIS E. TEMPLE, EDWIN VIEIRA and GENARINO R. ZINNO and PETER HARRINGTON.

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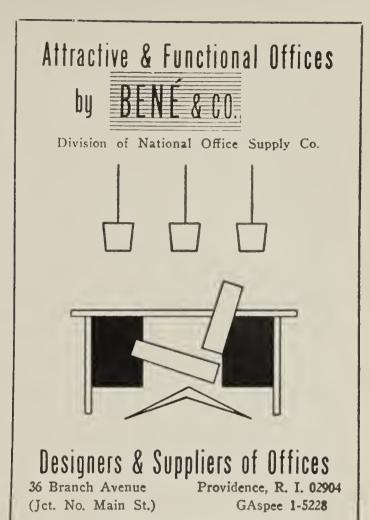
and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
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tions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric dis-

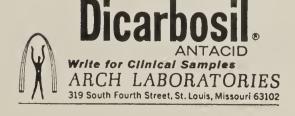
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A Local Habitation And A Name

Mortality Rate Improves If Patient Can Be Induced To Stay With Treatment

By Frank A. Seixas, M.D.

"The poet's eye in a fine frenzy rolling,

Doth glance from heaven to earth and earth to

heaven:

And as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name."

Shakespeare's prescient lines not only defined the poet's role, it defined that of the scientist. The whole business of names is a matter of making more and more precise definitions so that we may build bridges of communication to each other and to our surrounding environment. As we use the tools of science, we begin to develop names which assist us by crystallizing a concept. In fact, without these names we cannot move forward in our understanding of the natural world. Ohms, millicuries, volts. Humerus, tibia, mesencephalon. Smooth endoplasmic reticulum, RNA double helix. Neuron, axon, dendrite. It has been said that the first two years of medical school consist in developing a vocabulary. Some words are invented for a purpose. Others aggregate around phenomena, which cry for recognition and become more precise

FRANK A. SEIXAS, M.D., Medical Director, National Council on Alcoholism, Inc., New York, New York.

as our knowledge increases. Pneumonia, Bright's disease, tuberculosis are such examples.

I am now trapped in the history of a name, beating my way out to clarity for the purpose of crystallizing our concepts and for enabling us, the healers, to perform our historic duty of healing.

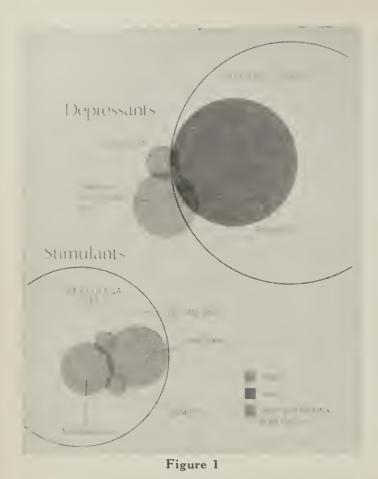
ALCOHOLISM AS A DISEASE

Drinking alcoholic beverages is such a ubiquitous phenomenon that we are late in coming to the separation and distinction of a disease of alcoholism. All along the way some physicians have recognized that there was a syndrome of alcoholism — Thomas Trotter,² Benjamin Rush,³ in colonial days, and more recently Tiebout, and Silkworth.

It was only this year, however, that the American College of Physicians adopted a resolution stating that alcoholism is a disease and the proper province of the internist.

Was the American College of Physicians merely slow in recognizing what others know? Was it mere venal opportunism, knowing of the increasing federal and state funds devoted to alcoholism? I think not. Rather, I think it has occurred beause our attention has been brought to alcoholism because of its vast spread, and because previous conceptualizations have been unfruitful. Most importantly tools have been developed which can be

(Continued on Next Page)



ACTION PROGRAM ALCOHOL SAFETY COUNTERMEASURES EVIDENCE THAT A PERSON WITH BLOOD ALCOHOL OVER .15% IS A SERIOUS PROBLEM DRINKER THE NUMBER OF 1 OUNCE DRINKS OF 86 PROOF WHISKY REQUIRED TO REACH A BLDOD ALCOHOL LEVEL OF 0.15% 2 3 4 6 6 7 8 9 9 9 9 9 1 1 2 3 4 5 6 7 8 8 7 2 3 4 5 6 7 SOURCE: COLOWELL, B.B. ROYAL CANADIAN MOUNTED POLICE OTTAWA CANADA

Figure 3

profitably used in investigation. Research, much of it initiated during the past three or four years, has begun to give us clarity where there was superstition, supposition, and myth. Scientists have begun to take a new look at alcoholism — and they are mining a rich lode.

TOLERANCE AND WITHDRAWAL

One of the major assists in our developing concepts of alcoholism has been the advent of the drug culture and our recognition that alcoholism is a true addiction. Such pharmacological addiction exists when a mind altering drug has characteristics of the development of tolerance and the pres-

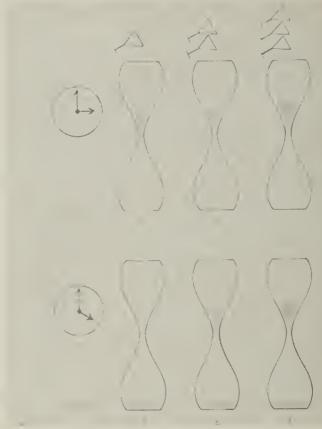
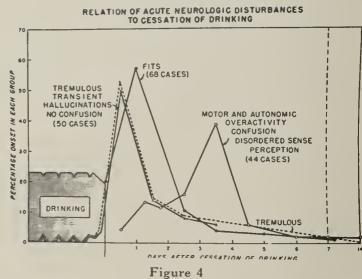


Figure 2



ence of psychological dependency demonstrated by a withdrawal syndrome. Seevers has classfied mind altering drugs as central nervous system (CNS) depressants and stimulants⁴ (Figure 1). Alcohol shares with opiates and the sedatives and minor tranquillizers this capacity for producing tolerance and withdrawal syndrome. Tolerance in alcoholism does not refer to an increased ability of the body to dispose of alcohol (Figure 2) since that ability can no more than double the body's rate of turnover from under one ounce of whiskey to a little less than two ounces per hour. It rather refers to the adaptation of the brain so that complex skilled

WEIGHT

acts can be performed at levels of alcohol which would render the novice unable to stand (Figure 3). Thus the thousands of people arrested each year for driving while intoxicated with blood alcohol levels over 150 mg per cent, are people who have developed tolerance. Most of us couldn't even get in the car under such circumstances. The withdrawal syndrome, elucidated by Victor and Adams,⁵ Isbell,⁶ and Mendelson,⁷ is another characteristic (Figure 4). This syndrome has recently been reproduced in experimental animals.

A phenomenon associated with alcoholism and with the kind of heavy drinking leading to it is the blackout period, recently studied by Ryback, and by Goodwin. These periods of amnesia are quite common in alcoholic patients, and seem to be related to a rapidly rising blood alcohol curve.

All the evidence, as well as our common sense, argues that research on alcohol must be performed at the level of its brain metabolism: we are now much more capable than before of investigating this area.

We have learned that ethanol changes the metabolism of catecholamines to abnormal reductive pathways, 10 and that these same catecholamines are implicated in the transmission of nerve impulses from cell to cell. 11

Because catecholamines do not cross the blood brain barrier, the search for their action must be taken inside the cranium. Here we find in vitro and in vivo studies which suggest that condensation products between alcohol, its metabolites, and the biogenic amines form products similar to opiates. ¹² Myers. ¹³ has shown in elegant experiments that minute quantities of alcohol, so small as not to enter into other bodily processes, infused into the ventricles of the brain, cause a phenomenal increase in alcohol preference in several species of animals. Moreover, this kind of reaction can be materially changed by altering biogenic amine levels in the body or substituting precursors or metabolities of these substances.

GENETICS AND METABOLISM

Genetic research has begun to elicit human family, ¹⁴ half sibling, ¹⁵ and twin patterns which differentiate alcoholics from non-alcoholics. Animals have been bred which avoid or prefer alcohol. ¹⁶ Most recently, taking outbred strains of rats bred for avoidance or preference of alcohol, Erikson, Forsander, and Ahti¹⁷ have discovered a mean difference in levels of 5 hydroxytryptophane in their brains, before they had ever been exposed

to alcohol. The mean 5 hydroxtryptophane levels became increasingly separated in proportion to the length of exposure to ethanol. After much fruitless effort, this seems to be the first time that we have been able to discover a specific biological difference logically connected to the development of alcoholism in any living species. This discovery may elucidate differences in the capability of developing tolerance.

118 have recently pointed out that during the long prodromal period of heavy drinking in an alcoholic, perceptual and cognitive difficulties of varying degrees become the natural background for the development of defenses seen as primary psychological characteristics of the alcoholic person and the similarities of these defenses to those of patients with chronic organic brain syndromes. Approaching the alcoholic patient in a treatment setting gains much from this recognition. However, there is one important difference; the brain syndrome of the alcoholic is slowly reversible once alcohol ingestion is terminated. Noble¹⁹ has recently shown that synthesis of brain protein is decreased by alcohol, but this decrease reverses when alcohol ingestion is terminated. Others²⁰ electroencephalographic changes lasting for two weeks subsequent to cessation of alcohol ingestion. Thus I have called alcoholism a subacute organic brain syndrome.

Alcohol's simple molecule diffuses throughout the body and enters into many metabolic chains. The discussion of whether its intrinsic calories or another factor are primarily responsible for the pathological events which take place are in part a semantic question. However, we have begun to pay more attention not only to these pathological processes, but their connection with alcoholism. Almost every organ system in the body is affected: the gastrointestinal tract by fatty liver, alcoholic hepatitis, Laennec's cirrhosis, malabsorption, astritis, and pancreatitis; the cardiovascular system by arrythmias and cardiomyopathy; the musculoskeletal system by myopathy and osteoporosis, the hematopoietic system by a variety of anemias and bleeding abnormalities. One curious and somewhat rare one is stomatocytosis with hemolytic anemia. Immune response and resistance to infection is decreased. Finally the nervous system itself affected by peripheral neuropathy and by permanent organic brain syndromes: Wernicke-Korsakoff syndrome, cerebellar and cerebral degeneration, and others.²¹

It would be folly, it seems to me, to obscure by not having a single name for it the unity of this ongoing progressive illness, fatal or crippling for so many — with suicide rates which are 58 times the normal,²² and countless automobile accidents which are a direct part of the process. To lump patients with alcoholism under the rubric of troubled persons, or neurotics, or character disorders is an invitation to blur the realities of the disorder and to continue to hinder progress toward its solution. We not only need the term alcoholism, we need the term alcoholic, or if you will alcoholic person. There is a person wherever there is a disease.

FACING THE PROBLEM

There is more to it than this, however. It is always a shock for the heavy drinking person, sinking deeper and deeper into social, vocational and physical troubles, to come to the conviction that he is "an alcoholic." But this conviction, once grasped, means that he has a nidus around which to reorganize his life. So many have said, "I was afraid I was losing my mind." "I was so guilty about neglecting my children." It explains the seeming irrationality of his surroundings, gives him an opportunity to allay his resentments and fears, gives him an action program which he can build. An unrecovered alcoholic woman said, "I'd rather be a drunk than an alcoholic. If you are an alcoholic people expect you to stop drinking and recover."

This is no different than being a diabetic or a cardiac — and people think of themselves in this way, if they are afflicted with these diseases. A recent trend toward honesty about our differences, which would through circumlocution add to stigma, has been one of the most encouraging trends in America. Black is beautiful. Women are women — not to be exploited. We should not be retrogressive just when the general populace is beginning to realize that alcoholism is not a sure sign of evil, bad intentions, or sin.

Thus I urge you to determine the diagnosis of alcoholism for your patients — and when it is determined, with the art of medicine at your command, get to the point of agreement with the patient that this is the diagnosis. The term alcoholic person is important and not the least important is the polite use of 'person'. So much for the name. What about the habitation?

NEW FACILITIES

For many years it has been customary for the

patient with alcoholism, if he were to be treated at all, to be sent to the distant state mental hospital for any phase of treatment. Public inebriates would either be left to sleep it off in a doorway or put into the local drunk tank of the jail. General hospitals have had rules in their bylaws against admitting patients for alcoholism. Insurance plans have excluded alcoholism.

What has resulted from this treatment scheme? Over 40 per cent of male admissions to state mental hospitals24 are for alcoholism. In the past, few of these patients have recovered. Public inebriates achieve records of 100 to 200 admissions without recovery.²⁵ Many of them die in the drunk tank. Others die in the street, or are taken into the hospital in late stages of pneumonia or, in the winter, with circulatory trouble and gangrene of the leg, necessitating amputation, or with delerium tremens, which has a fatal outcome in about 15 per cent of such cases.26 Despite the general hospital rules, in the hospitals serving a middle class public 30 per cent of the patients²⁷ at any time are alcoholic. In the ghetto hospitals the figure goes up to 50 per cent of the males and 46 per cent28 of the females. In tuberculosis hospitals, up to 80 per cent of the patients are alcoholic.²⁹

And none of these patients obtains treatment for his alcoholism. And the third party payments are enormously distorted by claims for gastritis and any other diagnosis the conscientious physician is forced into making to avoid the word alcoholism.

In a recent study in Ireland,³⁰ 100 patients in an alcoholism service had frequent hospital admissions for alcohol related illness for an average of 6 years before they first received treatment for alcoholism — and many of these during this time caused serious motor vehicle accidents.

A tremendous need has been building up. When a need builds up, some stopgap measures will be taken by those who see the problem. One of the first and most effective of these measures was the development of Alcoholic Anonymous (AA). This self-help peer group organization has demonstrated what can be done by individuals without the help of the medical profession. It has shown that alcoholism can be arrested, and among people who before their entry into AA may have been on the way to death and irreparable disease. There are now over 500,000 active recovering alcoholics in AA in this country alone. Because hospital beds were denied to alcoholics, dry-out places developed. and a few private hospitals began to admit some

patients for detoxification, for those who could pay. Sporadically, wards in city hospitals for alcoholics would open and close. It became apparent that an intermediate facility would be helpful. and a goodly number of rehabilitation farms were started, mostly in country settings. These institutions, some with improbable names like Chit-Chat Farms and Livengrin, originally started with only a good country milieu, a liberal indoctrination into AA, and the occasional service of a nearby physician. By now they have developed increasing sophistication, with various modes of group therapy, and some with resident physicians. Some are now building little hospitals for detoxificaton. Hazelden Foundaton in Minnesota, Melwood Farm in Washington, D. C., Hidden Brook in Baltimore and Gray Rock Inn in North Uxbridge, Massachusetts are additional examples.

NEED FOR FOLLOW-UP

The patient lucky enough to have the money could go through this process; but on his return to the community he could be faced with a return to a single room, no job, and the prospect of the bottle as the only attractive one. This need has been met by the halfway house, an institution in which, for a nominal sum, recovering alcoholics can stay; shore up one other's sobriety, resolve, and mood; and start to acclimatize themselves to the regular world of work. After a period of four months to a year, such a person may venture out on his own, sometimes in the company of several friends from the halfway house, to find an apartment and reenter fully the world from which alcohol has alienated him. A continued contact with Alcoholics Anonymous, further group therapy, or both, have been found useful either for life or for at least two years after the initiation of treatment.

There has been a growing awareness that the victim's chance of finding AA, which recruits solely by powers of attraction, was only 20 per cent. This has been an impetus to the development of state programs for alcoholism. Development of separate units for alcoholism was begun in some of the state mental hospitals, where program adaptations of the alcoholism rehabilitation farms could be installed.

Recognition that alcoholism is a family disease has resulted in adaptations in a number of these far-a-way centers. For example, Lutheran General Hospital in Park Ridge, Illinois, has constructed in the hospital unit suites where spouses or entire

families can accompany their alcoholic family member and participate in the reeducation process. Topeka State Hospital in Kansas has developed in the community where the patient lives a system of visitation by the counselor who was important in the patient's hospital treatment. Some have developed WATS (Wide Area Telecommunicaions Service) line telephone systems for followup of distant patients.

CARE IN THE COMMUNITY

The other possibility, of course, has always been present. Couldn't the patient be cared for in his own community? One such solution is the development of urban detoxification centers. This kind of facility, primarily utilized in this country for the care of the skid row alcoholic, includes an outreach program to scoop the inebriate off the street and a simple hospital setting for detoxification, manned by physicians and nurses. An important part of any detoxification is the initiation of a long range treatment plan; and social workers, alcoholism counselors, and AA meetings with referral can be effectively used for the latter phases of the five to ten day stay. Detoxification centers have been established in New York; St. Louis; Washington, D.C.; and Buffalo New York and in other localities.

The detoxification centers, as they exist in this country, take care of only the visible public inebriates. They have not been able adequately to take care of even this load comprising only 5 per cent of the alcoholic population.

This summer the Governors' Commission on Uniform Laws approved a draft law which would make hospitalization of the public inebriate mandatory. It is certain that most states will follow the five states which have already adopted such a law. Moreover, the American Hospital Association has promoted the Joint Commission on Accrediation of Hospitals to make mandatory for accreditation of general hospitals a plan for alcoholism treatment and is undertaking to assist in training personnel.

Thus a trend to induce community hospitals to become involved in the community aspects of disease is forcing us to re-examine what we are doing for the alcoholic in the community hospital. Thus one hospital, by obtaining the services of two AA members in the emergency room on Friday and Saturday nights for a month, saved \$1,000.00 in ambulance fees, which would have been charged to transfer alcoholics to the state hospital facility.

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But this is not enough. Certainly a minimum is to treat these people over the short 5-7 day period required for detoxification and referral. At the Baltimore Quarterway House and other facilities, it has been shown clearly that such treatment not only decreases the incidence of delerium tremens among the in-patients, but also encourages persons affected with alcoholism to come in earlier, even public inebriates. Thus the incidence of amputated gangrenous legs, devastating pneumonias, fatal arrhythmias, and terminal cirrhosis decreases, as well as already active delirium.

Yet community hospitals are in a favorable position to do much more. A common trend in such hospitals is toward the development of progressive care with intensive care units for the seriously ill, conventional active medical and surgical wards, and convalescent sections. The Edward Meyer Hospital in Elmira, New York and the Memorial Hospital at Yale New Haven Medical Center are among those that have developed minimal care wings, where patients may make their own beds, go to a cafeteria for meals, and experience an extended care period in which their own active participation promotes their rehabilitation. This is beneficial for diabetics, cardiacs, and persons affected with fractured hip, stroke, and alcoholism. The trend toward establishing psychiatric units in general hospitals is highly desirable for the management of alcoholic patients with serious psychiatric impairment. These service are complemented by community mental health centers. Outpatient departments and in-hospital AA meetings can easily be set up if proper interest and support are encouraged.

THIRD PARTY PAYMENTS

The exclusion by third parties of payments for alcoholism is a problem that is being solved. Blue Cross plans are increasingly dropping the exclusion of alcoholism, as are many commercial insurance plans, including those providing major medical insurance. The insurance companies are coming to realize that they can assess the true cost of alcoholism only when reliable actuarial data are available. This trend will help the conscientious physician retain his sense of integrity in treating the alcoholic without the need to dissemble regarding the nature of his illness.

The regimen of the Isadore Tuerck Quarterway House in Baltimore is of interest. Each week for the three week period of the patient's stay the same program is repeated consisting of films, illustrated lectures, talks, and group sessions. The director, when asked the reason for repetition, explains: "When they come in, their brains are scrambled." Twenty of the original 36 patients treated in this way are sober and working two years after the treatment.

In a recent assessment of treatment results, Doctor Wallace Mandel of John Hopkins Hospital found about 50 per cent recovery or improvement regardless of the modality of treatment used. While this aroused no enthusiasm in him as to the efficacy of one form of treatment over another, he did find something of interest. Regardless of the method of treatment used, the mortality rate dropped precipitously, if the method engaged the patient sufficiently to induce him to stay with it.

Isn't that what it's all about?

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Lay Views On Activity After Myocardial Infarction

Sample Of Rhode Island Residents Expect Rehabilitated Cardiac To Return To Work

By Lois A. Monteiro, R.N., Ph.D.

This survey examined the opinions of Rhode Islanders regarding the amount of activity which they thought was appropriate for a man who had recovered from a myocardial infarction. The data was collected by the Brown University Population Research Laboratory as part of their larger survey of health, and attitudes and behavior relevant to health among a representative sample of the Rhode Island population. The opinions in the present study were obtained in interviews with 1,137 adult residents of the state.

Physicians have recognized that fear of activity on the part of the patient and his family often hampers optimal myocardial infarction rehabilitation and may lead the recovered patient unduly to restrict his activity (Klein²). A questionnaire survey by the *Journal of the American Medical Association* of selected members of the Academy of General Practice was conducted to ascertain the opinions of these doctors on the topic of the major problems which they found in the rehabilitation of patients with cardiovascular disease. The physicians felt that, although most patients could return to their previous occupation without restric-

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tion, the elimination of fear and threat associated with heart disease was the number one problem to be faced in encouraging such a return to activity. In the opinion of the physicians surveyed, an "emphasis on the more optimistic aspects of recovery whenever possible" was thought to be the best means to combat the pessimistic view often held "regarding the ability of the patient to return to work and to a useful productive life" (Williams⁶).

THE LAYMAN'S FEAR OF ACTIVITY AFTER A MYOCARDIAL INFARCTION

Thus while the physician plans for the cardiac to return to work as part of his normal program of recovery, from the point of view of the lay public withdrawal from an active life may be an expected option for the person who has had a heart attack. Although it is not the option most commonly taken by the recovered patient, nor the most therapeutic, such behavior still may not be considered highly unusual by the general public. Rather, the layman's conception of heart disease may support the cardiac patient in believing that by virtue of his attack he is automatically (proforma) disabled and is legitimately exempt from former activity.

Some measure of lay-public opinion about heart disease has been obtained from Louisiana residents (Bertrand and Storla¹). The respondents of that survey commonly expressed fatalistic attitudes about heart disease; and, as the authors report, (Continued on Next Page)

'many persons believe heart disease incapacitates one for any kind of work or activity even that involving a minimum of effort." Another study done in Indiana showed that farmers there sometimes were pessimistic about the prognosis for heart disease: "In some instances a man may be told by his family and friends that his 'days are numbered,' while his doctor tells him that he can 'have a long life with heart disease'" (Riedel et al.5). A conservative attitude towards activity after an attack was also expressed in a national television documentary, "Heart Attack," shown by the American Broadcasting Company, in which the heart attack victim was depicted as "a man with all the symptoms — pains in the chest, trouble breathing, unable to work" (ABC network, February 10, 1969).

THE DATA

For the present study, as was noted above, lay opinions regarding the amount of activity expected of a cardiac who had survived an attack and was in the rehabilitative period were collected by face-to-face interviews with 1,137 respondents of a representative sample of Rhode Island households. It was anticipated that the Rhode Island public would expect the post-infarction patient to restrict his activity and not return to his former patterns of behavior. The respondents were asked to agree or disagree with a series of statements about activity which were prefaced by the remark, "suppose a man has gotten over a coronary heart attack and the doctor says there is no permanent damage. Would you agree or disagree that . . ." *The twenty items which followed were divided into ten statements which were restrictive or pessimistic in outlook and ten statements which were favorable towards activity and an optimistic prognosis. They were presented in the following randomly chosen order:

- 1. He will generally need to visit the doctor only for checkups.
- 2. He can never work like he used to.
- 3. With his heart condition his days are numbered.
- 4. He can go on with his social life just as before.
- 5. He should quit work and take life easy.
- 6. He should consider himself no sicker than someone who has recovered from a major operation.
- *The author wishes to thank Doctor Alex M. Burgess, Jr. for his assistance in devising the questions.

- 7. He should gradually try things for himself to see how much he can do.
- 8. He will always have to be under strict doctor's orders.
- 9. If he does not feel well he should be careful about his leisure time activities, even if his doctor says he has no permanent damage.
- 10. He will always be kept from an active life.
- 11. He should feel all right even when he does things that require an average amount of activity.
- 12. He can participate in his usual leisure time activities.
- 13. He should not try to do anything that he thinks might give him chest pains.
- 14. He can live a long life even with his heart condition.
- 15. He should not do anything requiring even normal physical activity (such as taking a long walk).
- 16. He should return to his old job if his doctor OKs it.
- 17. Moderate activity would be better for him than too much rest.
- 18. He should be considered a sick person for the rest of his life.
- 19. He will feel better if he is working than if he just stays home.
- 20. He should avoid being with groups of people such as at meetings.

It was thought that lay opinions about this medical condition might be strongly influenced by previous personal experience with heart disease and with exposure to the medical viewpoint about rehabilitation. Therefore the respondents were also asked whether they or someone close to them had suffered a heart attack within the last five years. The respondents were then divided into three categories of experience which were used in crosstabulations: those who had had an attack, those who knew someone who had had an attack, and those who had no experience with heart disease.

FINDINGS

Although judging from the previous studies one would have expected laymen to hold the view that the cardiac should restrict his activity, the analysis of the responses to the agree-disagree statements shows that when experience is not controlled the respondents taken as a total group expected a good deal of activity from the cardiac and agreed with statements which were favorable

Table 1. Percentage of Agreement with Activity-Favorable Items

		PERCENTAG	E AGREEIN	3
Item	Had Attack (N=28)	Know Someone (N=358)	No Experience (N=751)	Total (N=1137)
He Should Return to His Old Job If His Doctor O.Ks It	100	96	96	96
He Will Feel Better If He Is Working Than If He Just Stays Home	75	97	95	95
Moderate Activity Would Be Better For Him Than Too Much Rest	96	97	93	95
He Can Live a Long Life Even With His Heart Condition	93	97	93	94
He Should Gradually Try To Do Things For Himself To See How Much He Can Do	89	87	84	85
He Will Generally Need To Visit The Doctor Only For Cheek-Ups	89	82	82	82
He Should Feel All Right Even When He Does Things That Require An Average Amount of Ac- tivity	82	80	80	80
He Can Participate In His Usual Leisure Time Activities	68	82	77	78
He Should Consider Himself No Sieker Than Some- one Who Has Recovered From a Major Operation	82	75	72	73
He Can Go On With His Social Life Just As Before	46	61	58	59

Table 2. Percentage of Agreement with Restriction-Favorable Items

	PERCENTAGE AGREEING			
Item	Had Attack (N=28)	Know Someone (N=358)	No Experience (N=751)	Total (N=1137)
He Should Not Try To Do Anything That He	62	0.5	0.3	0.4
Thinks Might Give Him Chest Pain	93	85	82	84
1f He Doesn't Feel Well He Should Be Careful Even 1f His Doctor Says He Has No Permanent Damage	79	82	84	83
He Will Always Have To Be Under Strict Doctor's				
Orders	57	54	55	55
He Can Never Work Like He Used To	50	39	47	43
He Will Always Be Kept From An Active Life	32	16	20	19
With His Heart Condition His Days Are Numbered	21	15	19	18
He Should Avoid Being With Groups of People, Such As At Meetings	32	14	18	17
He Should Be Considered a Siek Person For The Rest of His Life	32	14	14	14
He Should Not Do Anything Requiring Even Normal				
Physical Activity, Such As Taking A Long Walk	21	11	14	13
He Should Quit Work and Take Life Easy	25	8	14	12

towards activity. As Table 1 reveals, a majority of the sample agreed with each of the activity-favorable items. Furthermore, on forty per cent of the items the respondents show a very high consensus with more than ninety per cent of the total sample in agreement with the activity-favorable remarks.

The respondents were not, however, as unanimous in their rejection of the ten restrictive items; as Table 2 shows, in response to these statements there was a weakening of the support among these laymen for active behavior on the part of the rehabilitated cardiac. On two items a majority of

(Continued on Next Page)

the total sample took a restrictive point of view, and on two other items about half of the overall sample agreed with the restriction-favorable statements. On the remaining six items the responses, however, indicate that only a small portion of the overall group agreed with the restriction of activity.

The high levels of agreement with two restrictive items, "if he doesn't feel well he should be careful even if his doctor says there is no permanent damage" and "he should not try to do anything that he thinks might give him chest pains," indicate that, although the lay public expects the cardiac to resume many of his former activities, e.g., working, attending meetings, and taking long walks, ,he is nevertheless also expected to be cautious about pain and to be aware of the dangers of "overdoing it." The agreement with the first of these items ("if he doesn't feel well, etc.") also suggests that this is a situation in which the patient may not feel the usual social pressures to comply with medical advice, for the lay public expects the cardiac to "be careful," i.e., to cut down on his activity, despite his physician's reassurances that there has been "no permanent damage" to his heart.

THE EFFECT OF PREVIOUS EXPERIENCE

When the responses are subdivided according to the person's experience with heart disease, some important differences appear in the percentages of agreement with both the pro-activity items and the restrictive items. If experience with illness leads to increased knowledge and to familiarity with the medical point of view regarding rehabilitation, then those persons with more experience should be more likely to expect the cardiac to return to his normal activity. Table 1 shows that this conjecture holds for those persons who know someone with heart disease. On all items respondents in this catgeory were more likely to agree with activity-favorable statements than were the persons who had no experience. But the responses of the persons who said that they had had an attack do not follow this pattern of agreement. On three of the activity-favorable items this subgroup, which presumably experienced the closest contact with the illness and with the medical view of cardiac rehabilitation, has significantly fewer members in agreement with remarks supporting the active viewpoint. Nevertheless, the levels of agreement by all three sub-groups on the activity oriented statements were quite high (in only one instance do less than 50 per cent agree), even though the "had attack" sub-group takes a slightly more restrictive position than the other sub-groups.

On the restrictive items persons who claimed to have had an attack were the most restrictive in their expectations. This sub-group had the highest percentage of agreement with nine of the ten restrictive items. Even though on some of the items the proportion of the total respondents agreeing with the restrictive expectation is relatively low, for example only 12 per cent agree that the cardiac "should quit work and take life easy," nevertheless for this item the "had attack" subgroup has a percentage of agreement (25 per cent) which is almost twice as high as the percentage for the sub-group who had had no experience (14 per cent) and three times as high as the 8 per cent agreement by the sub-group who knew someone who had had an attack. The same pattern continues for all the restrictive items: those respondents with the most direct experience are the most restrictive in outlook, those who know someone with an attack are the least restrictive, and the uninitiated group without experience falls between the two.

These data indicate that the experience of having a heart attack may lead the person to beliefs about post-attack behavior which are even more disparate from the medical view than are the beliefs of the uninitiated. They further suggest that the threat to life which the person experiences with a heart attack is such that even successful recovery and limited personal restriction does not counteract the belief that the cardiac must be careful and must avoid activity which might provoke a further attack.

The sub-group differences may explain in part the physicians' belief that the public opposes activity for the cardiac (Williams⁶). The uninitiated Rhode Islanders do not seem to be dramatically against activity, and, in fact, the majority expect the cardiac to be active. However, the particular public with which the physicians are in contact, persons who have had attacks, does tend to take a more restrictive view. Thus, the physicians' beliefs as expressed in the *J.A.M.A.* survey may derive from the fact that physicians deal with the segment of the population which holds the most restrictive point of view, i.e., persons who have an attack.

The responses of the experience sub-groups were tested to see if the amount of restriction which the respondent, or the person he knew, had during

Table 3. Level of Expectations for Work Activity and Leisure Activity By Experience of Restrictions

After Heart Attack

	Experience Had Attack (N=28) Know Someone Who Had Attack (N=358)				
Expectations					
	Activity was Restricted, %	Activity was Not Restricted, %	Activity was Restricted. **	Activity was Not Restricted, %	
Low Work Activity Expectations	39 (7)	30 (3)	9 (12)	10 (22)	
High Work Activity Expectations	61 (11)	70 (7)	91 (120)	90 (204)	
Total	100 (18)	100 (10)	100 (132)	100 (226)	
Low Leisure Activity Expectations	50 (4)	45 (9)	23 (22)	22 (60)	
High Leisure Activity Expectations	50 (4)	55 (11)	77 (74)	78 (202)	
Total	100 (8)	100 (20)	100 (96)	100 (262)	

the rehabilitation period influenced their answers. But, as Table 3 shows, the personal experience of restriction did not lead to significant differences in the amount of activity which was expected of the cardiac. For example, about two-thirds of the "had attack" group said that they were restricted in their own work activities after their attack, yet the percentage of these respondents who scored low on the work activity expectations (39 per cent) was about the same (30 per cent) as among the respondents who had had an attack but were not restricted in their own activity. A similar distribution occurs within the category of respondents who "knew someone" who had had an attack. Whether or not the person known by the respondent was restricted in his work activity, the proportion of respondents with low work activity expectations remains at about 10 per cent. Furthermore, the experience of restriction of leisure activities has no significant effect on activity expectations. When the responses about the person's experience of leisure restrictions and his expectations of leisure activity of the cardiac are crosstabulated, the proportion of respondents with low and high activity expectations remains remarkably stable. About half of the persons who had had an attack, and about one-fifth of the persons who knew a cardiac, hold low leisure activity expectations. Thus, experiences with regard to activity restriction did not significantly alter the judgments

these respondents made about the behavior of the theoretical heart attack patient.

RELATION OF OPINIONS TO OTHER SOCIAL CHARACTERISTICS

The variable of personal experience as a factor influencing the layman's activity expectations has thus far been emphasized. But the investigation considered as well the relationship between activity expectations and the more traditional social characteristics, such as age, sex, income, and education. Positive correlations were found between the person's activity expectations scores and his education and income. Those with more education or higher income were more likely to expect the cardiac to be active.

The age of the survey respondents, which ranged from sixteen to eighty-nine with a mean of 47 years, was found to be rather weakly correlated with activity expectations scores, and older respondents were found to be more restrictive than the younger ones in their views about behavior after an infarction. The direction of this relationship suggests that perhaps the person's views become more restrictive as he grows older, that is, he becomes more restrictive as the risk of having an attack increases and the illness becomes more salient for him. On the other hand, it may be that views do not change with time, whereas medical theories about heart disease do.

(Concluded on Page 101)

Aldo Castellani -- (1877-1971)

His Contributions To Tropical Medicine And To Dermatology Embody A Lasting Monument To His Memory

By Francesco Ronchese, M.D.

Aldo Castellani, a Knight of the British Empire and a Marquis of Chisimaio of Italy, was born in Florence, Italy, Sept. 8, 1877 and died in Lisbon, Portugal, Oct. 3 1971, at the age of 94.

He named scores of bacteria and fungi, discovered the spirochete causing sleeping sickness, and originated the absorption test (the Castellani's phenomenon) for the classification of certain closely allied bacteria. The diagnosis of latent amebiasis is made with the so-called three Castellani's signs. Castellani's paint (Carfusin®, Rorer) a messy, but highly effective and painless, topical, carbol-fuchsin dye mixture, widely used against fungal and bacterial skin infections, is a tool in everyday practice of dermatology.

He was educated in Florence and was a pupil of Grocco (the Grocco triangle), of Banti, and of dermatologist Pellizzari. Later he went to work with Kruse in Germany and developed the already mentioned "absorption test" and then to the

FRANCESCO RONCHESE, M.D., Clinical Professor of Dermatology, Emeritus, Boston University Medical Center.

London School of Tropical Medicine under Manson. In 1902 he joined the expedition sent to Equatorial Africa and Uganda to investigate an epidemic of sleeping sickness. Here, in the cerebrospinal fluid, he made the discovery of the trypanosome carried by the tsetse fly.

From Africa he went to Ceylon where he remained for 15 years as professor of tropical medicine, dermatology, and pathology. Here he discovered the Treponema pertenuis, the cause of yaws, described Cryptococcosis epidermica, Tokelau (Tinea Imbricata), Copra Itch, a paratyphoid (Shigella of Castellani), and the broncho-spirochetosis of Castellani.

In 1915 Castellani moved to Naples as professor of tropical medicine in that university. From there he went to Poland, Serbia, and Macedonia to investigate infectious disease epidemics.

The well known Castellani and Chalmers Manual of Tropical Diseases appeared at this time.

In 1920 Castellani's teaching position was unique. He was chairman of the departments of tropical medicine in London, New Orleans, and Rome all at the same time.



Aldo Castellani in 1955

In 1922 his practice in Harley Street, London grew to fantastic proportions, especially with royalty of all nations, and with world celebrities. In his autobiography he tells of Rudolph Valentino going to see him without an appointment (the Italian way) and how, when the receptionist saw "Rudolph Valentino" signed in the book, looked at him and fainted.

In 1935 he was put in charge of health and sanitation of the Italian army during the Ethiopian war. A detailed account of hospitals, laboratories, and the incidence of tropical diseases was reported in JAMA in 1936.¹

An editorial of the Providence Evening Bulletin of March 8, 1937 entitled "A GREAT RECORD", stated: "In some wars the number of those who have died from disease has been twice as large as the number slain in battle. This was true for instance for the Boer war. In the Italian invasion of Ethiopia the case was reversed. There were but 599 deaths from disease and 1,099 from weapons. Doctor Castellani built up such splendid morale among the soldiers that avoiding their daily quota of quinine came to be considered as disgraceful as throwing down their arms in battle and taking their two lemons a day as deep an obligation as keeping their powder dry.

The record stands as a tribute to a great physician."

TIME magazine of June 8, 1936 under the title "MAN WHO WON THE WAR" reported: "He set up six air-conditioned hospitals for sunstroke cases. He inoculated every Italian landing in Africa with the vaccine he himself had discovered for prevention of typhoid, paratyphoid, and cholera. He shipped to Africa tons of quinine for malaria, tons of serum tubes for tetanus, gas gangrene and snake bite, and 18,000 hospital cots. He covered suspected water holes with petroleum, fumigated camps. The Italian army fought under unprecedently thorough medical care."

In a monograph (Castellani, *Little Known Tropical Diseases*, Lisbon, 1954) he discussed leg ulcers which he called tropicaloid, true tropical ulcers, and maggot infestations.

Castellani settled in Lisbon in 1946 as a professor of tropical diseases and director of the Colonial Hospital. In two of his latest contributions^{2, 3} he reported the discovery of a new micrococcus and named it Violagabriellae from the name of one of the daughters of former King Humbert of Italy, to which household Castellani was attached.

In his autobiography (A Doctor in Many Lands, Doubleday, 1960) he describes his enjoyment of his "garden of microbes", a collection of bacteria and fungi from many lands — white, red, black, yellow, violet, smooth, rough, crinkly, and spiny cultures in tubes. He tells of how he examines them daily as a connoisseur does with his collection of art pieces.

In 1968 a memorial tablet was unveiled in his honor in his tropical medicine school.⁴

He was the first president of the International Society of Tropical Dermatology founded in 1960.

The death of Aldo Castellani is a severe loss to the medical world.

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Editorials

MULTIPHASIC SCREENING IN RHODE ISLAND

In April, 1969, a Multiphasic Screening Center opened adjacent to Rhode Island Hospital in a new building provided by the hospital and financed by federal and state grants. The purpose of the program was to examine the impact of screening on the medical care system and the feasibility of a systems approach to a series of medical procedures. A group of about thirty medical procedures and tests was offered to citizens over 40 vears of age who would designate a physician or clinic to whom a computerized report of findings could be sent for interpretation in conjunction with a physical examination. During the twenty months' duration of the federal contract, 19,720 individuals were screened free and printout reports mailed to 850 different physicians, a majority of all Rhode Island physicians.

The program without planned recruitment was popular with the public; a waiting list of 8,000 persons rapidly developed, later dispersed when a fee of \$40 was instituted at the conclusion of federal support. Of those persons screened 60 per cent had one or more test abnormalities. Followup reporting by physicians was requested and was secured for 88 per cent of the participants. Physicians judged that in 43 per cent of the screenings nothing new was added by the procedure. In 26 per cent of participants an existing diagnosis was confirmed; a new diagnosis was suggested in 27 per cent; and referral of the patient was made in 19 per cent.

The impact of screening on the medical care system of Rhode Island remains indeterminate, but the program in this State is the only one of the four established in the nation that survives although presently in reduced form. The feasibility of a systems approach has been amply proved. Considered as an experiment then, what have we learned from multiphasic screening? Analysis of the participants has revealed that in socioecon-

omic status they are above the median for Rhode Island. The poor were little represented in the selection of patients. Those who availed themselves of the opportunity for free screening were in varying degree already part of the medical care system. Screening does not save physicians time. The extensive data provided requires careful analysis. The disparity between 60 per cent of patients with abnormal tests and 27 per cent of patients in whom a new diagnosis was suggested reflects a large medical effort in evaluation, retesting, and referral.

Does screening separate the well and the worried well from the sick and the potentially sick? Probably not. Screening technology is not sufficiently developed to cover the gamut of all illness; important illness may be entirely missed by current methods. On the other hand screening in Rhode Island has revealed many instances of unrecognized disease where discovery was of great value to individual patients and doctors. And screening provides a rich data base the value of which will require years to assess. Cost-effectiveness therefore will take years to analyze. Since physicians are the recipients of these screening data, what is their opinion of its value? A questionnaire submitted to 350 physicians yielded 202 replies. Qualified approval of varying degree was expressed by 70 per cent of the respondent doctors; 14 per cant were opposed to the procedure.

Today multiphasic screening in Rhode Island is looking for a new role. It is presently being tried in a new ambulatory patient care complex under development at Rhode Island Hospital. The director of the mutiphasic screening program in Rhode Island, Doctor Herbert Constantine, summarized his report on the federal phase of MPS as follows: "Although 20 years old, the multiphasic screening concept still seems to be in search of a place in the medical care system."

THE ROCKY MOUNTAIN LABORATORY—SIZE IS NOT ESSENTIAL TO SUCCESS

The Bitterroot Valley of Southern Montana was long known to early settlers as the site of a virulent and fatal disease. Rockey Mountain spotted fever.

The settlers thought the disease was brought about by drinking water from melted snow. The indigenous Indians however, much wiser, thought the sickness was caused by tick bite. It was not until 1906 that Howard Taylor Ricketts proved the Indians right by demonstrating that ticks feeding

on a sick animal could infect a healthy one.

^{*}Reprinted from the November 1, 1971 issue of the New York State Journal of Medicine with the permission of the publisher.

In the early 1900's 80 per cent of the people who contracted the disease in this area died from it, and there were indication that the disease was spreading throughout the west. In the past forty years it has reached the eastern seaboard.

Pressure for action on spotted fever increased after 1921, when a prominent Montana State legislator and his wife died of the disease. This led to a combined attack by the State of Montana and the federal government through the United States Public Health Service.

A small investigative laboratory was built in the heart of the endemic area in 1928. This lapse of twenty-two years from the time of discovery of the source of the disease and a concrete move to do something about it is regrettable and a scd commentary on government inertia.

The laboratory finally established is small even today, having only 145 workers, 26 being doctoral level researchers. Their accomplishment has been great. They were able to isolate the organism isponsible for spotted fever and develop a competent vaccine to counteract it. This served well into the antibiotic era when broad spectrum drugs

superseded the vaccine. The agent causing Q fever was discovered at this laboratory as well as the Ribi press used to rupture the cell walls of bacteria.

The laboratory houses the most complete tick collection in the world, 800 species. It is one of the two places in the world where ticks can be identified; the other is the laboratory supported by the United States Navy in Cairo, Egypt.

Much important work is going on today in fields removed from acarology; they include work on molecular biology, immunology, medical entomology, and viral diseases, particularly those of concern to veterinarians.

Isolated and small, the laboratory atmosphere is good for scientific work but rough on families. However, the families bear it as do the families of other explorers, and there are some compensations; the wide open sky, an agreeable climate, breath taking mountain vistas. As one scientist noted: "There are fewer nicer ways to analyze a problem in one' s laboratory than to contemplate it as one watches the sun set behind the precipitous peaks of the Bitterrcot Range."

HEPATITIS-ASSOCIATED ANTIGEN TESTS FOR ALL DONOR BLOOD NOW REQUIRED

The American Association of Blood Banks (AABB) has amended its standards to require testing of all donor blood and blood components for the hepatitis-associated antigen. Beginning October 1, 1971 blood banks must fulfill this requirement for accreditation by the Association. The new tests will increase the cost of blood processing in the United States by as much as \$5,000,000 but will enhance greatly the quality of transfusion service.

With general use, it is hoped, ways will be found to increase the effectiveness of the tests in detecting carriers of hepatitis, currently about 20 to 30 per cent.

While hepatitis-associated antigen tests involve additional equipment and materials, some blood banks are performing them without increasing processing fees. The changes in the Association's Standards require rejection of a donor "if his blood has ever been known to contain hepatitis-associated antigen". The Standards further provide that: "All donor blood shall be tested for hepatitis-associated antigen using reagents and technics specified by the Division of Biologics

Standards, or proven to have equivalent sensitivity and specificity. The blood shall not be used for transfusion unless the test is non-reactive. In an emergency, blood may be transfused before completion of the test for hepatitis-associated antigen. If the test is subsequently positive, the recipient's physician should be notified."

This requirement will apply to any blood component collected by plasmapheresis "on each and every occasion" whether the component is to be transfused as a single donor unit or is to be pooled for fractionation.

All of the recommendations of the Association's Ad Hoc Committee on Hepatitis-associated Antigen Testing, of which Dr. Enold H. Dahlquist of Rhode Island Hospital is a member, were adopted. Among these were the following: that the AABB in cooperation with other interested and appropriate agencies establish a national program to develop a hepatitis registry of HAA positive donors, recipients, and laboratory personnel for purposes of epidemiologic study; provide a proficiency testing service and appropriate controls and reference standards; provide confirmation of HAA positive

blood samples for other hospitals; and investigate the subspecificities of HAA.

Many AABB member blood banks already are conducting tutorials to train technologists in performance of the HAA tests. This training activity is to be accelerated on a national scale and enhanced by Association-developed teaching aids. In addition, specifications on guidelines and safeguards appropriate to the handling of infectious materials involved in the testing are now available.

HAA positive donors must be apprised of their status and warned against future donations. This information should be considered as privileged. Although the HAA carrier state is not now a reportable condition, hepatitis is a reportable dis-

ease. Notification of the local Department of Public Health may be advisable.

It is now practicable for all blood banks to test all donors for HAA using agar gel diffusion or counterelectrophoresis technic. This requirement does not exclude use of more sophisticated tests such as complement fixation, hemagglutination inhibition, or radioimmunoassay by those laboratories with personnel and facilities adequate for their performance. Appropriate controls should be used with each test method.

It must be recognized, however, that in its present stage of development, routine HAA testing of blood is an adjunct to other methods of donor screening and selection, and not in itself a definitive test.

BATTERED-PATIENT THERAPY

BATTITURE IN MEDICINA.

LUIGI VISONE
NAPOLETANO,

ALL'ILLUSTRISS. SIG.

D. FRANCESCO

BUONCORE

Primo Medico del RE delle due Sicilie, e Protomed.del Regno di Napoli.



IN VENEZIA M.DCC. XLI. Presso Domenico Tabatco.

Rinaldo De Benedetti in II Nostro Mondo of April 15-30, 1971 writes about a curious essay published in 1741 by Neapolitan physician Luigi Visone titled: *The Efficacy of Beating and Trashing in Medicine*.

Therapeutic violence is not a specialty of the past. If in the past patients were bled white, were covered with blistering ointments, were scolded or fire-burned to stop bleeding, were beaten to

chase away the devil, now also we are using violent uncontrollable chemicals in the attempt to cure diseases, so far incurable. Shock therapy is not accepted by everybody.

Centuries from now, our therapeutic modalities may be laughed at, as at present our official medicine laughs at Chinese acupuncture.

The thrashing advocated by Doctor Visone was not administered to expel the devil, but was prescribed apparently in cases in which we now would prescribe aspirin, iron, vitamins, or a topical harmless grease.

Doctor Visone used a belt, a whip, face-slapping, fist-pounding. He felt the need to write a book to explain the rationale of such therapy and to try to prevent the patient from retaliating by knocking the samaritan to the floor.

He reminds us that Seneca prescribed thrashing for high fever. Particularly receptive to the treatment were weak and emaciated patients, in whom the weak parts were made to swell in order to attract nourishment.

Paralyzed limbs are stimulated by thrashing with a stinging nettle (ortica). Constipation is helped by pounding on the belly and the knees. According to Doctor Visone this is confirmed by the authority of the philosopher Campanella, who relates that a certain prince kept a servant to administer such a knocking.

A number of cases are reported, as in an ordinary medical paper, and the comment is made that the originator of such therapy is no less great than the discoverer of the New World.

F. Ronchese, M.D.

MEDICAL TECHNOLOGY CHALLENGE

A number of biomedical products are being made in the Rhode Island area. In a recent newspaper story it was reported that a local Rhode Island manufacturer of conventional hyperdermic needles, because of the advent of disposable needles, was forced to diversify his operations. We are told that the company, Everett Products Company of Providence, now makes, in addition to needles, clinical thermometers, laboratory-animal feeders, small stopcocks and adapters for medicals, and miniature tubing for industrial customers.

The firm has made hypodermic needles for 23 years, and it still does; but a representative of the company stated that the national market for reusable needles is 10 per cent less than formerly. Further, competing in the disposable market was considered too costly a venture for a small company.

The company has diversified into specialized biomedical needles, such as those used for tissue biopsy. Needles of all types now comprise about one third of Everett's sales, with biomedical products the fastest growing segment.

To make disposable needles for the medical profession would have required an inordinate investment for the fully automated equipment necessary to reduce costs. Large amounts of working capital would also be needed to maintain a suitable inventory of stainless steel tubing. Because of the lack of capital, Everett Products elected to retain only a small part of the disposable needle market; namely, the producer of the premium needle in the dental field.

Approximately a third of the company's sales are accounted for by clinical thermometers. It was reported that this aspect of the company's sales was the one with the highest growth potential.

Traditionally, the manufacture of clinical thermometers has been conducted by small companies in rooms illuminated only by the gas flames with which employees work; but the Rhode Island firm uses electro-optical magnifying devices to display the work, so that it can be accomplished in normal lighting.

Superior Plastic Products of Providence, a family business connected with Eastern Scientific Company, also in Providence, is in the process of pro-

ducing medical products with its sterile urine specimen containers, "Uritainer" specimen kits, and suction catheter tubes. The company will also produce "Uni-Cath," a urethral catheter tube of a rubber-like plastic.

Superior Plastic also created a disposable styrene solution bowl for operating rooms. It is interesting that the idea emanated from Rhode Island Hospital.

Superior discovered that the Massachusetts General Hospital had studied and found that the costs of cleaning and sterilizing its reusable solution bowls was 18 cents apiece; however, Superior's will sell for 11 cents each. Since Massachusetts General Hospital uses 250 bowls a year, it is calculated that an annual saving to the Hospital of \$17,500 can be anticipated.

Rhode Island's largest contribution to the world's medical needs is Davol Rubber Company, subsidiary of International Paper Company since October, 1968. Its contributions to the medical field include disposable surgical drapes, gowns, and apparel, which are made in Cranston.

Extruded plastic, also manufactured by Davol, is used in making suction instruments for the operating room. The Davol-Simon "Dermatome" developed in the late 1960s by Dr. Stanley Simon of The Miriam Hospital is a portable instrument with a disposable head. It has received an enthusiastic reception by the profession.

A new graduated, plastic "Uri-Meter" which measures urine output is considered by the company to be a real achievement in the field, along with its new tracheostomy tray.

Another Rhode Island firm, Torbot Company in Warwick, makes ostomy bags and related appliances. This firm may be the biggest independent custom-fitting manufacturer of ostomy bags in the country. Vinyl Packaging Inc. in Pawtucket makes the plastic bags which Torbot uses.

It will be interesting to watch the progress of these companies in meeting other medical technological challenges. It is fitting that Rhode Island, a center for small industries, should play an increasing role in the manufacture of medically related products.

IMMUNOLOGICAL CONTROL OF PSEUDOMONAS INFECTION IN BURNS

Advances in the treatment of burns have gradually lowered the mortality and morbidity. Better understanding of fluid balance, control of infection, early covering of the burn surface, and developments in rehabilitation have contributed to this progress. Infection has remained the primary obstacle to further improvement in results. The topical use in various clinics of Sulfamylon®, silver nitrate solutions, and silver sulfadiazine has helped control the problem of infection. *Pseudomonas aeruginosa* infection has continued to be a source of frustration.

A contribution from the Burn Institute of the University of Cincinnati gives hope of the ultimate successful management of this perplexing problem.

A polyvalent *Pseudomonas* vaccine was given to 96 consecutive patients who survived the initial five days after admission with burns of greater than 26 per cent (the average was 42.8 per cent) In this group there were three deaths from *Pseudomonas* sepsis (3.1 per cent). In a similar consecutive group of 75 patients similarly treated but before the advent of the vaccine, 11 patients (14.1 per cent) succumbed to *Pseudomonas* infection.

In the most susceptible group, those with 40 per cent or more of burned body surface, the over-

all mortality was reduced 15.7 per cent and the mortality from *Pseudomonas* sepsis by a striking 86 per cent.

Administration of the vaccine was either by the intradermal route alone, or by a combination of intradermal and intramuscular routes. Injections were given as soon as possible after admission, then after four and eight days, and thereafter at weekly intervals with a maximum of 10 injections. Serum samples were taken regularly for antibody determinations. Minor local reactions were frequent, but there were no serious reactions in over 1,500 reactions.

The authors believe that the vaccine represents a significant advance in the management of the seriously burned patient and that its use has resulted in a significant decrease in mortality following burn injury.

It is hoped that this encouraging and landmark contribution will soon be confirmed by further studies and that the vaccine will thenceforth be available for general use.

REFERENCE

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COMMITTEE FOR NATIONAL HEALTH INSURANCE

Started in 1968 by the late United Automobile Workers president, Walter Reuther, the Committee for National Health Insurance is now tooling up organized labor's manpower resources for an extensive "educational" effort to use as a Congressional lobbying mechanism for adoption of its National Health Insurance Plan.

We are told that the "educational" effort will include the use of labor union members and other membership organizations including its lobbying arm, the Health Security Council.

One report discloses that the Committee for National Health Insurance has put together loosely organized groups in the districts of the uncommitted members of the House Ways and Means Committee to persuade them to support the Health Security Bill. Besides this imposing array of lobbying resources, the United Automobile Workers has reportedly assigned 20 full-time staff work-

ers who are organizing National Health Insurance educational programs in UAW's Community Action Programs around the country.

In its drive to secure passage of its National Health Insurance program, the written word has not been neglected; in fact, we are told that six pamphlets have been printed to assist in the educational effort, and that copies expected to number in the millions will be distributed.

Of course, the National Health Insurance Committee has as its chief Senate advocate, Senator Edward M. Kennedy, who has aggressively promoted the Health Security Act in hearings around the country.

Obviously, this massive effort by the Committee for National Health Insurance is a vigorous challenge to those who propose other forms of National Health Insurance. Caveat emptor.

* * *

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contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.

Warnings: Drug Dependence: Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia. Surred speech, vertigo. Careto ataxia, slurred speech, vertigo. Carefully supervise dose and amounts pre-scribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, apartusional extensions hallusingsies. ing, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2, weeks) or substitute a short-acting barbiturate, than gradually withdraw. Potentially Hazardous Tasks: Driving a motor vehicle or operating machinery. Additive Effects: Possible additive effects between morrobamate, alcohol. effects between meprobamate, alcohol, and other CNS depressants or psychotropic drugs. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. Ani-

mal data at five times the maximum recommended human dose show reduction in litter size due to resorption. Meprobamate appears in umbilical cord blood at or near maternal plasma levels, and in breast milk at levels 2-4 times that of maternal plasma. Children Under Six: Drug not recommended.

Precautions: To avoid oversedation, use lowest effective dose, particularly in elderly and/or debilitated patients. Consider possibility of suicide attempts; dispense least amount of drug feasible at any one time. To avoid excess accumulation, use caution in patients with compromised liver or kidney function. Meprobamate may precipitate seizures

in epileptics.

Adverse Reactions: Central Nervous System: Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. Gastrointestinal: Naufacture distributed in the control of the control sea, vomiting, diarrhea. Cardiovascular: Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). Allergic or Idiosyncratic: Usually after 1-4 doses. Milder reactions: itchy, urticarial, programments and programments. doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/ mate/mebutamate and meprobamate/ carbromal. More severe, rare hypersen-

sitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). Hematologic: Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. Other: Exacerbation of porphyric symptoms.

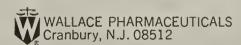
Usual Adult Dosage: 1200 to 1600 mg daily, in three or four divided doses; doses above 2400 mg daily not recommended.

mended.

Overdosage: Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatic cally; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

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HOUSE OF DELEGATES REPORT

(Continued from Page 67)

formation of a special section for medical students, and one for interns and residents, the plan for open hearings on the organizational structure of the AMA to be held at the annual and clinical meetings in 1972, the development of guidelines for compensation for doctors' assistants, plans for assistants to primary care physicians, a new health and accident coverage to be offered the membership, and other matters.

Dr. S. J. Goldowsky, alternate delegate, commented on the tremendous activity carried forward by the AMA in the interest of the health of the public, and in behalf of the physicians of the nation, and he urged that members support the AMA, and seeks ways to recuit the younger physicians to join. He suggested that the Society might sponsor programs on the issue for new physicians, and he urged that the Long Range Planning Committee consider such objectives.

REPORTS OF COMMITTEES

The Speaker noted that there were many committee reports in the handbook for the information of the members, but none called for any specific action by the House.

Action: A motion was made, seconded and voted that the written reports of the following committees, as submitted to the House, be received and placed on record: Special Committee on Peer Review, Liaison Committee with Brown University, Highway Safety, Continuing Medical Education, Aging, Mental Health, Allied Medical Professions and Services, Child-School Health, Disaster, Nursing, Medical Aspects of Sports, Cancer, Social Welfare, and the Joint Committee of Physicians and Carriers Workmen's Compensation.

REPORT TO STATE LEGISLATIVE COMMISSION ON MEDICAL EDUCATION

Dr. Raul Nodarse commended President Mac-Donald for his outstanding presentation to the state legislative commission on medical education, copy of which was included in the handbook for the House meeting. He asked that the House extend to Dr. Earle F. Cohen the privilege of addressing it. Permission was given.

Doctor Cohen also commended Doctor Mac-Donald for his report to the legislative commission in which the role of private medicine was clearly presented and supported, and he urged the Society that they seek to get coverage of the statement in

(Continued on Page 91)

559-9

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HOUSE OF DELEGATES REPORT

(Continued from Page 90)

the local newspapers, even to the extent of purchasing space to publish the report.

ADJOURNMENT

The session was adjourned at 5:50 p.m.

Respectfully submitted: Stephen J. Hoye, M.D. Secretary

REPORT OF THE SECRETARY

Stephen J. Hoye, M.D.

The Council has held two meetings since the September session of the House of Delegates, and the following represent major actions taken:

The appointments of Society delegates to the annual meetings of other state medical societies in New England were approved as follows: Connecticut State Society meeting: Dr. F. B. Agnelli; New Hampshire-Vermont combined meeting: Dr. Richard P. Sexton: Massachusetts Medical Society: Dr. John A. Dillon; Maine Medical Association: Dr. Hannibal Hamlin.

- The Council was informed that a meeting was held with officials of the Tri-State Regional Medical Program to discuss possible assistance in the development of health foundation under the Society's aus-
- A report from the Cancer Committee was reviewed and approved for submission to to the House.
- Approval was given a letter co-signed by the President with the President of the Hospital Association of Rhode Island which was directed to the president of the medical staff of every voluntary hospital in Rhode Island urging education of all attending physicians and house staffs of the impact on the patient's bill of various laboratory tests and medications ordered.
- The Medical Economics Council was in 5. formed of the Society's position on a proposal of a study utilizing length of stay

(Continued on Next Page)

- reports of the Commission on Professional and Hospital activities.
- o. The appointment of a Committee on the Delivery of Health Care was approved to consist of the following: Drs. Joseph E. Caruelo, Chairman, Robert E. Baute (East Greenwich), Frederick Eckel (Westerly), John P. Grady, Thomas Head, Robert V. Lewis, Stanley D. Simon, and Henry M. Tyszkowski (all of Providence); Charles A. Hall (Newport), Rudolf A. Jaworski (Pawtucket) and Patrick Levesque (Cumberland).
- 7. Dates for meetings of the Council and House were set as follows:

 COUNCIL: Monday, February 28, 1972

 HOUSE: Wednesday, March 8, 1972, at 8 p.m.
- 8. The Council was informed that Dr. Salvador E. Luria, Massachusetts Institute of Technology geneticist and Nobel Prize winner, will be the Charles V. Chapin Orator at the Annual Meeting on March 15, 1972.
- 9. The appointment of a Long Range Planning Committee of the Society was approved to consist of the following: Drs.

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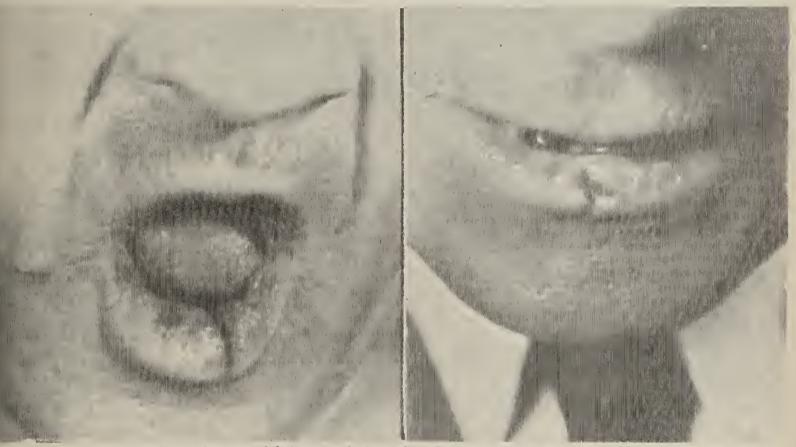
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- Robert V. Lewis, Chairman, Stanley D. Davies, John P. Grady, Stephen J. Hoye, and Stanley D. Simon.
- 10. The President was authorized to name a nominating committee to present a slate of four physicians to serve on the Board of Directors of Physicians Service.
- 11. The President informed the Council of a study on the utilization of acute care beds in the fourteen general hospitals of the State was being undertaken by the Health Planning Council.
- 12. The financial status of the R. I. Medical Journal was reviewed with the Council Ly the Chairman of the Publications Committee, and the Council voted that the Society give necessary financial assistance to meet a possible 1971 operating loss. The Chairman was requested to report to the Council on the publication's cost in the first three months of 1972.
- 13. The Council reviewed and approved of answers to five questions submitted to Dr. Richard J. Kraemer, Chairman of the Scciety's Committee on Aging, by U. S. Senator Pell.
- 14. The Council referred to the Interagency Council on Smoking a suggestion that smoking be prohibited in the new Civic Arena in Providence when it is completed and open to the public.
- 15. The Council invited Dr. Arthur Geltzer, President of the R. I. Ophthalmological Society, to meet with it and to discuss the actions planned by that specialty group to contest the constitutionality of legislation enacted at the January, 1971, Session of of the R. I. General Assembly which allows optometrists to use drugs in their practice. The Council voted to invite Dr. Joseph Cannon, State Director of Health to meet with the House on January 19 to discuss the problem from the standpoint of the Health Department, and it also voted to propose financial assistance to the aid in the court suit on the legislation.
- 16. The Women's Auxiliary was authorized as the agency to receive AMA project credit for 1971-72 and future years for American Medical Association-Educational Research Funds raised in Rhode Island from physicians, auxiliary members, local medical associations, and other sources.

DERMAQUIZ

Conducted by FRANCESCO RONCHESE, M.D.



At left, a deep, painful fisure on the lower lip of two years duration.

At right, a hard plaque, also fissured, moderately painful, of several years duration.

Answer on Page 101

- 17. The re-appointment of Dr. Edwin Lovering of Pawtucket as the Society's representative on the Board of Directors of the Postgraduate Institute of the Massachusetts Medical Society was approved.
- 18. With the reorganization of the Council of the New England State Medical Societies it was voted that the Rhode Island Medical Society rejoin that Council for 1972.
- 19. The annual financial report of the Treasurer was reviewed and approved subject to professional audit.
- 20. An unsolicited donation of \$200 from the A. H. Robins Company towards support of the Society's Annual Meeting was accepted, and the Treasurer instructed to notify the Company of the Society's appreciation of such support.
- 21. The report of the Benevolence Fund was received and approved.
- 22. With approval of the Council, the President named a Nominating Committee to present a slate of officers and delegates for 1972 consisting of Drs. Paul Barber, Bertram H. Buxton, Jr., F. B. Agnelli, Robert

- V. Lewis, Stephen J. Hoye, and the President, ex officio.
- 23. The Council voted that the Society authorize a painting or photograph of John E. Farrell, Executive Secretary for more than three decades, to be made and placed in the Medical Library, and named a committee consisting of Drs. John P. Grady and Stephen J. Hoye to complete the arrangements.
- 24. The matter of the wage price freeze was discussed, and Dr. Grady stated that the matter should be brought to the attention of the House that members be alerted to file fee profiles annually since there apparently is no accumulated carryover from year to year on the current 2.5% increase allowed.
- 25. The Vice President, and Chairman of the Society's Committee on Aging, Dr. Richard J. Kraemer, discussed the work of the White House Conference on Aging which he attended as an official Rhode Island delegate, and he stated he would file a report on the meeting to the House.

John P. Grady, M.D.

FINANCIAL REPORT FOR 1971

The financial report for 1971 will be subject to final audit by Ward, Fisher and Company at a later date. As I indicated earlier in 1971, we would end the year with a very low reserve. The total cash reserve as of December 31 was \$4,863.30 of which only \$3,434.62 is allocated to general fund use. The balance represents a grant of \$500 from the R. I. Foundation all purpose medical fund, a balance from unexpended grants from the National Library Resource Fund, the State Health Department for emergency or disaster training programs sponsored by the Society's Disaster Committee, and the Adelson fund.

We will not have the report on the Rhode Island Medical Journal until the end of January when the books for that account will be closed after receipt of December advertising revenue. It is likely that the Society will have to meet some additional Journal expense in accordance with the agreement approved at the previous meeting of the Council.

INVESTED FUNDS

A detailed report is on file at the executive office of the invested funds handled for the Society by the Trust Department of the Industrial National

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Bank. Our long range investments have continued to provide us with a good return in spite of the fluctuations in the stock market. The report shows the book value representing the initial cost of the investment and the present market value.

Most of our funds are restricted due to the terms of the bequests to the Society, but we have available as the general fund approximately \$64,000 which the Society may use as it wishes.

BLUE CROSS-PHYSICIANS SERVICE

Because of the federal price freeze the Blue Cross requested that we assess members of our Society's group for only the first quarter, anticipating permission for an increase in January for the final three quarters. Such increase has not been forthcoming, so we are billing our members this month for the remaining three quarters, until November 1, 1972, at the same rate as prevailed last year.

BENEVOLENCE FUND 1971

During 1971 the Trustees of the Rhode Island Medical Society Benevolence Funl extended financial aid to five physicians and/or their families. In addition to direct cash payments, the Trustees also provided the payment to Blue Cross and Physicians Service for insurance coverage for four beneficiaries.

A financial summary of the year is presented: CHECKING ACCOUNT

CHECKING ACCOUNT		
Cash balance, Industrial Na	ational	
Bank, Jan. 1, 1971		\$1,278.24
Cash transfer from savings ac	count	3,000.00
Total:		\$4,278.24
Disbursements		
Payments to, and in behalf		
of beneficiaries \$3	3.473.57	3,480.00
Miscellaneous	6.43	
Total: \$3	,480.00	3,480.00
Cash Balance Industrial Na	ational	
Bank. Dec. 31, 1971		798.24
SAVINGS ACCOUNT		
Cash on hand, Industrial Na	ational	
Bank, Jan. 1, 1971		\$8,384.04
Contributions by physicians in	1971	1,222.00
Interest on savings	347.15	
Total:	\$9,953.19	
Transferred to checking account	\$3.000.00	
Cash Balance, Industrial Na	ational	

The Trustees again express their sincere appreciation to the Society for its donation, and to the many physicians who made individual contributions, many as memorials, during the year. Assistance to our colleagues and their families in their time of need is a most worthy activity of the mem-

Bank, Dec. 31, 1971

\$6,953.19

bership, and the Trustees welcome contributions to the Benevolence Fund at any time. Such contributions should be sent to the Executive Office.

Respectfully submitted:
Alfred L. Potter, M.D.
George W. Waterman, M.D.
David Freedman, M.D., Chairman

January 11, 1972

RESOLUTION FROM MENTAL HEALTH COMMITTEE

"WHEREAS the Committee on Mental Health of the Rhode Island Medical Society unanimously affirms that psychiatry is an integral part of medical practice, and

WHEREAS mental illness is not properly covered in some of the new proposed national and local health insurance programs, and

WHEREAS the lack of coverage for psychiatric disorders would be detrimental to the patients, whereas it has been demonstrated that coverage for psychiatric disorders is actuarially sound and possible, therefore be it

RESOLVED, That the House of Delegates of the Rhode Island Medical Society go on record as encouraging that all insurance programs, private and governmental, should include psychiatric services on par will all other medical services, and

RESOLVED, That this resolution be forwarded to the Secretary of Health, Education and Welfare, to the Senators and Representatives from Rhode Island who are interested in national health insurance, to U. S. Representative Paul G. Rogers, Subcommittee on Public Health and Welfare, and to the administrators of health insurance plans in Rhode Island."

SPECIAL COMMITTEE ON STUDY OF PEER REVIEW

The special committee authorized by the House of Delegates, and appointed by the President, to review the various peer review mechanisms existing in the state, and to make recommendations to the House, submits the following recommendations for consideration by the House:

- 1. That Peer Review be operated on a state basis, with one representative, named by the President of the Medical Socety, from the respective Peer Review Committee of the seven district or county societies forming the State Society Peer Review Committee to which House of Delegates may add 2 members-at-large.
- 2. That physicians, third party payors for health services, and consumers be made aware of the availability of the Peer Review Committee of

the State Medical Society to receive cases and complaints.

- 3. That issues submitted for consideration by the State Committee be reviewed on receipt by the chairman of the committee, with the aid of staff, and where advisable be referred to local district or county Peer Review Committees named by the local organizations for investigation and action, said committees to report within 30 days to the State Committee.
- 4. That each specialty medical society in the State be authorized to name a Consultant Peer Review Committee which shall be available to the State Society Committee and the District Society committees and third party payors for expert advice on matters involving the respective specialty practice.
- 5. That a written decision on a case reviewed by it be submitted by the Chairman of the district or county peer review committee to the Chairman of the State Society Committee, and, subject to final review by the State Society Committee, the decision be made known to the complainant party 30 days or sooner.
- 6. That an appeal of a decision of the State Society Committee decision may be made to the Council of the Rhode Island Medical Society.

(Continued on Next Page)

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7. That the peer review committee shall be apstatus as a permanent committee of the Society, to be established as follows:

"The peer review committee shall be appointed by the President with the initial appointments staggered so that one-third of the members' terms will expire each year. The maximum term shall be 3 years. The Chairman of the peer review committee shall be appointed annually by the President."

"The important purpose of the committee shall be to review the quality, cost, and utilization of medical care in the community, making use of available hospital data such as PASMAP and to recommend corrective measures where it deems such action to be appropriate."

Respectfully submitted: William J. MacDonald, M.D. President

LIAISON COMMITTEE WITH BROWN UNIVERSITY

The Medical Society Liaison Committee with Brown University held a meeting on December 8, 1971. Doctor Pierre Galletti explained to us that there are three major committees at Brown looking into the medical school situation. He also explained that committees are meeting with representatives of the University of Rhode Island, Providence College and other undergraduate schools in Rhode Island about the possibility of organizing programs that would allow their students to enter medical school at Brown. The

financing of the medical school was discussed, and Brown would be eligible for an initial federal grant to start the degree granting school. A state commission chaired by Representative John Revens is studying the feasibility of state financed medical school for Rhode Island, and I appeared before this Committee with Doctor MacDonald.

It has been suggested that it would be advisable

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Box 477, Digby, Nova Scotia (902) 245-4138 for speakers to appear before service clubs, such as Rotary, Kiwanis, Lions Club, etc., to inform the community of developments in regard to the degree granting medical school. The Liaison Committee is concerned about possible problems arising between the relationship of private physicians and full time members of the Brown faculty.

Respectfully submitted: Richard P. Sexton, M.D. Chairman

HIGHWAY SAFETY COMMITTEE

A meeting of the Committee was held November 8, 1971. It was noted that the continued drive to reduce the blood alcohol level from 0.10 to 0.08 at which a person would presume to be under the influence of intoxicating liquor had been unsuccessful but that efforts should be continued in that direction, as well as in driver education and driver training.

Basically, it was felt more effort should be spent in getting behind limited access divided highways which are much more safe than the usual four lane roads. Seat belts which could have saved perhaps 40 percent of the present highway fatalities are worn by only a quarter of the people and legislation will be sought to make wearing of seat belts mandatory. Education of the public will be advocated by a conference with the local newspapers, and perhaps a request to the Police Department to get statistics in all accidents on ejection and the wearing of seat belts. Also discussed were the use of flares, and the use of seat belts in school busses.

Respectfully submitted: Thomas C. McOsker, M.D. Chairman

CONTINUING MEDICAL EDUCATION COMMITTEE

The Committee met recently and it reviewed the minutes of the successful Continuing Medical Education Seminar held in Newport,, September 18, 1971. The members expressed their appreciation for the financial support of the Conference by the Rhode Island Department of Health, Brown University, and the Hospital Association of Rhode Island. The Committee approved the financial report of the seminar and endorsed the recommendation that a physician should be desigated in hospitals in the state to be responsible for a Continuing Medical Education program. The Committee pointed out that Newport Hospital and Kent County Memorial Hospital are examples of such programs in action. The Committee also

agreed that the salary of the Continuing Medical Education director should be in proportion to the time and energy devoted to planning and implementation expended on each program. The Committee requested that a list of hospitals without CME Programs in the state, lacking this type of direction by a physician, be secured and a letter be sent to the hospitals asking what programs would be undertaken.

The Committee recommended that a second annual Continuing Medical Education Seminar be held in Newport in September of this year in view of the success of the initial conference.

As a part of education in the quality of care, the Peer Review concept was endorsed by the Committee members who concurred that the punitive thrust of peer review mechanisms should be avoided. The Committee agreed that Utilization Review should be kept separate from peer review.

The Committee also endorsed the concept of Doctors Clement R. Brown and Stephen E. Gold-finger and agreed that the trustees of various hospitals should be made more aware of Continuing Medical Education Programs so that the funds and personnel can be provided in each hospital to accomplish this essential objective. It was suggested that perhaps the CME Committee of the State Society could meet with the administrators and/or trustees of the Hospital Association of Rhode Island in order to provide this awareness. The Committee agreed that Doctor Margaret Klapper's MIST program would not be feasible here in Rhode Island.

The Committee reaffirmed its previous position in opposition to mandatory CME programs and agreed that the Rhode Island Medical Society strengthen its role as a basic resource to individual hospitals and county district medical societies and should begin to develop relationships with educational institutions such as the University of Rhode Island, Rhode Island College, and Providence College to take advantage of their educational expertise and audio-visual techniques.

It was recommended that two representatives from each hospital in the state be named to the Committee so that if one fails to appear, the other will be able to attend.

Respectfully submitted: Henry S. M. Uhl, M.D. Chairman

MENTAL HEALTH COMMITTEE

The Committee deplores the loss of Doctor Har-

old W. Williams, its former chairman and a member for a great many years. It will participate in a common enterprise with other organizations and hospitals for a suitable memorial.

The Committee has been particularly concerned with the matter of proper coverage for mental health in the many public and private insurance programs that are now being developed. There exists a persistent misconception that psychiatric disorders require a more expensive coverage than other areas of medical treatment. A considerable body of facts and experience has been collected and developed by the Council on Mental Health of the American Medical Association and by the American Psychiatric Association which proves that this is not so. Coverage of psychiatric disorders is not only actuarially sound, but also indespensible in terms of economy, of prevention and of early treatment of all kinds of illnesses.

The Committee is introducing a resolution to this effect in the House of Delegates.

> Respectfully submitted: Hugo Taussig, M.D. Chairman

ALLIED MEDICAL PROFESSIONS AND SERVICES COMMITTEE

The Committee met on December 9, 1971, with Dean H. Youngken of the University of Rhode Island as invited guest.

The function of the Committee was defined as of gathering information on the allied health professions for the membership of the society and to obtain society opinion on important issues which should be transmitted to governmental or other agencies dealing with the health professions, such as the Health Sciences Education Center.

In response to a local inquiry concerning the licensing of a Physician Assistant, the Committee, in agreement with the recent position of the AMA

(Continued on Next Page)

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declaring a moratorium on licensing, opposed further licensing of groups until the problem of governmental licensing is resolved on a national level. It encouraged certification of health personnel by the already existing professional institutions rather than licensing.

> Respectfully submitted: George F. Meissner, M.D. Chairman

CHILD-SCHOOL HEALTH COMMITTEE

The Child-School Health Committee continues to review current school health forms and examinations in an effort to simplify form and produce more efficient and worthwhile exams. The Committee has taken a stand against optometric invasion of the school system without ophthalmological supervision, and has also taken a start in favor of discontinuing routine small pox vaccination in Rhode Island.

Respectfully submitted: Wilson F. Utter, M.D. Chairman

DISASTER COMMITTEE

The Rescue Practice and Emergency Aid Course, conducted at Rhode Island Junior College, was devised by the Committee to upgrade the quality of training of Rescue Squad Workers and ambulance personnel in the state. The initial course at the Junior College has been completed and an examination has been held. Out of 34 students, 33 successfully completed the course; one student dropped out. Certificates were awarded to those who successfully passed the course. As part of the course, the class was broken into three groups and each group was given a tour of a hospital.

The Junior College has informed us that if the demand is made, it would be willing to conduct two courses for the Rescue Squad workers, starting in February, one in the Providence area, and a second course in another section of the state.

In the near future, the Committee will review the current status of Disaster Plans at Hospitals.

> Respectfully submitted: Robert L. Conrad, M.D. Chairman

NURSING COMMITTEE

The Nursing Committee has been involved in several areas to provide Medicine's input concerning the challenges facing the Nursing profession.

As Chairman of the Committee, we have participated in the meetings of the State wide Community Planning Committee on Nursing and Nurs-

ing Education which is studying the myriad ways to overcome the problems of contemporary nursing.

We have also attended the meeting of the Society's Allied Medical Services Committee which is seeking and is coordinating information regarding the certification of allied health professionals.

Respectfully submitted: Maurice Adelman, M.D. Chairman

COMMITTEE ON MEDICAL ASPECT OF SPORTS

The Committee on the Medical Aspect of Sports plans to hold another national meeting of the Medical Aspect of Sports at the University of Rhode Island during the middle part of August, 1972. The Committee is in the process of inviting speakers of national prominence in the field of sports medicine. The Committee is further desirous of having as guests trainers and coaches of colleges and secondary schools in the State of Rhode Island free of charge if a reasonable contribution can be obtained from the Rhode Island Medical Society and the Rhode Island Secondary Schools' Athletic Association.

It costs about \$8,000. to put on the program; consequently, it becomes necessary for us to charge some kind of tuition to those who attend the two-day meeting.

As above stated, if contributions can be obtained from the Medical Society and the local High School Coaches' Association, the Committee will consider very seriously admitting Rhode Island physicians, trainers and coaches free of charge.

Respectfully submitted: A. A. Savastano. M.D. Chairman

CANCER COMMITTEE

A meeting was held on Monday, October 18, 1971, at the Medical Library. The major item discussed was a proposal of the Rhode Island division of the American Cancer Society for a breast cancer demonstration day which they plan to hold in March, 1972. At that time the Cancer Society will show a film to the women. This will be followed by individual training in breast self-examination by participating physicians. It is the plan of the Cancer Society to enlist the aid of local medical societies in order to obtain adequate physician manpower for this project.

The Cancer Committee recommends to the House of Delegates that the proposed plan of

the American Cancer Society be endorsed by the Rhode Island Medical Society.

> Respectfully submitted: Martin E. Felder, M.D. Chairman

WORKMEN'S COMPENSATION COMMITTEE

We had one meeting of the Joint Committee of Physicians and Carriers on Workmen's Compensation Insurance on November 12th, 1971. There were two cases outstanding, one of which had already been settled, and the other which was heard, recommendations made, and the Insurance Commissioner instructed as to our feelings in the case. There is one outstanding case before our Committee at this time.

Respectfully submitted: Walter C. Cotter, M.D.

STATEMENT TO LEGISLATIVE COMMISSION ON MEDICAL EDUCATION

by

William J. MacDonald, M.D.

President of the Rhode Island Medical Society

I would like to remark on some of the aspects of the impact of a medical school on medical care in Rhode Island which are important to physicians.

The quality of medical care in Rhode Island was good long before the advent of the Brown medical program in 1963. The Rhode Island Hospital for many years has had excellent residency programs in surgery, medicine and orthopedics and since the end of World War II, has developed good training programs in many of the other specialties. The Providence Lying-In Hospital has been actively engaged in formal medical student teaching since the 1930's. Medical students from Harvard and Tufts medical schools have come on a regular basis in the past with occasional students from other schools coming for elective training. For the past several years, one-half of students of each class of Tufts Medical School receive all of the clinical Obstetrical-Gynecological training at the Providence Lying-In Hospital. In addition to the physicians at the Lying-In Hospital with teaching appointments, many physicians hold appointments in the medical schools in Boston and regularly teach there. Medical education is not new in Providence.

There is not complete acceptance of an M.D. Program at Brown on the part of Rhode Island physicians, but not for the reasons implied by statements in articles in the press that would like to have the public believe that Rhode Island

physicians are incompetent and are afraid to have experts "looking over their shoulders."

The reasons given by those physicians who hold some reservations about proposed Brown expansion are serious ones and reflect a concern for the cost of medical care and for the availability of hospital beds for patients of physicians in private practice.

There is no questioning the fact that the cost of hospital care has increased considerably since full time physicians have been added to hospital staffs. A doubling of the number of full time physicians in the affiliated hospitals are proposed for a full M. D. program would further increase hospital costs. This, however, is a legitimate expense of medical education. The people of Rhode Island, if they want a medical school, must decide whether this expense of medical education is to be met through hospital charges or by state support of hospitals having programs, i.e. ultimately by taxation.

Most of the time of full time physicians and house staffs is devoted to patient care and research, and only that part of their time devoted to teaching is properly chargeable to medical education. At this point, it is important to note that about 50% of physicians go into practice in the community in which they have their residency training. Therefore, support of a good training program in our hospitals is the most effective method of ensuring a supply of the best physicians for Rhode Island.

There has been some concern on the part of practicing physicians about the number of beds in the affiliated hospitals which have been preempted by the teaching services, making it difficult to obtain beds for often sicker but less interesting patients. There is also dissatisfaction on the part of community physicians with the tendency of some teaching services to permit interns and residents to take over the care of the private patients of well trained and experience attending staff physicians. These matters are now being considered by a Liaison Committee of the Rhode Island Medical Society and the Brown Medical faculty, and I hope they will soon be resolved. I mention these, not as arguments against medical education but as an explanation for the apprehension of those reasonable physicians who have not supported the idea of a M.D. granting school in Providence.

Dr. Werner Baum testified before this group

in opposition to support of a medical school at Brown. Doctor Baum expresses the opinion that no funds for medical education should be approved until the needs of the state colleges had been met. The people of Rhode Island must establish some priorities. If the needs of our people are for more physicians and allied medical personnel, and for educational opportunities for Rhode Islanders who want to fill these needs, then a reasonable government should supply those needs by directing funds where the needs exist rather than to previously budgeted but not essential areas of the state education system.

Since the decision of this commission to support or not to support a medical school at Brown will be most if the University decides not to proceed with an M. D. granting program, I would like to comment on the attitude of some of the members of the liberal arts departments at Brown.

In 1826 Brown had a medical school. It was a fragile fledging enterprise but had the makings of a fine teaching institution, being part of good university with a community of physicians who were eager to take part in promoting medical education in Rhode Island. However, the administration of Brown at that time, failing to appreciate the great potential of a medical school in Providence, imposed impossible restrictions on its medical faculty, and the Brown Medical School was terminated.

Now the University has a second chance to become a center of medical education. A university such as Brown, has a real obligation to the community in which it exists. The objections of the liberal arts faculty which are based on fear of less, income for their departments is understandable but not forgivable, and probably without basis. A close perusal of the cost accounting of the Brown Medical Sciences program reveals that if there were no medical sciences program at Brown today, the University would have as large or a larger deficit than it does with the program.

The objections of some faculty members that a medical school at Brown would change the character of the University is probably well founded.

However, Harvard, Yale, Pennsylvania, Columbia, Cornell, and Dartmouth seem to be no less in stature for having a medical school faculty.

It would be a sad day for Brown if the University for a second time failed to fulfill its obligation to the community in which it occupies such a prestigious and privileged position.

I would respectfully suggest to you gentlemen that you recommend to the legislature that they vote a subsidy to the Brown Medical School program based on a per capita grant for each Rhode Island resident accepted. I would also suggest that the State ensure access to this medical program for qualified students from the other colleges in Rhode Island by insisting on a contractual agreement between those institutions and Brown, probably involving coordination of admission committees.

COMMITTEE ON AGING

Your Chairman of the Committee on Aging attended the White House Conference both as official State professional delegate and as the representative of the Society. The tremendous block of votes held by the elderly citizens was forcefully brought to bear on the White House Conference and its recommendations. All sections recommended the Administration on Aging become an independent agency within the Department of Health, Education and Welfare, with status and financing appropriate to the task. All aspects of health care, both short and long term, were classed as basic rights of individuals. Many sections recommended a comprehensive National Health System or program for all ages, with the aged having special priority at this time. The consensus was that financing and support should come from both Social Security and general tax revenues with no deductibles, no co-insurance and no co-payments. Quoting from one of the policy proposals—"Both the immediate expansion of the current program and a future National Health Plan should provide for a public/private partnership in the delivery of services and for Federal financing and quality controls in order to assure uniform benefits and uniform application of the standards of quality. Centralized responsibility for standards and controls over health facilities and services must be combined with protection, for the patient and provider, from arbitrary, capricious, and varied application and interpretation of existing as well as new standards." The protection clause immediately preceeding carries the words arbitrary, capricious, subjective, etc., which has been seen in much literature relating to bureaucritic administration. It shows intense dissatisfaction and distrust of administrative bureaucracy in carrying out their varied duties whether it be in the State Department, Public Works hearings, the section on mental and physical health or the

special concern sessions on long term care of the elderly. In brief, a concept of total national health care with more immediate attention to the problems of the elderly was definitely advanced despite a large majority's concern with the bureaucratic administration of this plan.

There are copies of the report to delegates of the 1971 While House Conference on Aging on file at the Library for your perusal. They are most enlightening.

> Respectfully submitted: Richard J. Kraemer, M.D. Chairman

LAY VIEWS ON ACTIVITY AFTER MYOCARDIAL INFARCTION

(Concluded from Page 81)

The medical views about activity for the cardiac of an earlier period were more conservative than at the present time, and it may be that the older persons in the survey are holding a view of heart disease which is consistent with the former medical practices.

The respondent's sex was not related to his activity expectations. The 491 males and 646 females included in the sample did not differ significantly in cross-tabulations of sex by expectations about the work, the physical activity, or the social activity of the rehabilitated cardiac, although the male respondents did tend to have slightly higher activity expectation scores.

The respondents were also presented with a list of eighteen doctor's orders which might be prescribed for a cardiac, and instructed to imagine himself as the sick person and to check those orders which he would expect his doctor to give him if he "had survived a coronary heart attack and returned home." The orders not only referred to activity levels, but also covered diverse aspects of recovery such as diet and smoking, as well as three erroneous items. Aside from the order to stop smoking, which 80 per cent of the respondents felt would be included in their doctors' advice, the activity-favorable order to "resume activity gradually" was checked by the next highest number of respondents, sixty-seven per cent. This further verifies the general tendency for members of this sample to expect a person to be active following a heart attack.

CONCLUSION

The respondents of this sample of the Rhode Island population said that they expected the rehabilitated cardiac to return to an active life. In contrast to the view that laymen have a pessimistic, fearful attitude towards coronary heart disease, these respondents tended to agree with the physicians' beliefs that a return to work and to activity are more appropriate for the cardiac than is restriction and withdrawal from an active life. What appears then in the literature as a large discrepancy between physician and client views of post-heart attack behavior was not supported by the findings in this study. However, the data do suggest that the direct personal experience of having a heart attack tends to accentuate the differences which were found between the physician and client views. The differences in expectations which were expressed by respondents with differing personal experiences of heart disease indicate that, although the whole sample expected a rather high level of activity from the cardiac, those persons who claimed that they had had a heart attack in the past took a significantly more restrictive view about activity for the cardiac than did either the group who had had no experience with heart disease or whose experience was secondhand, through knowing someone who had had an attack.

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T T T

DERMAQUIZ ANSWER

(See Page 93)
Left, granuloma fissuratum.
Right, squamous cell carcinoma.



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MEDICAL BUREAU of the Providence Medical Association

A LOCAL HABITATION AND A NAME

(Concluded from Page 76)

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One Sentence Essay

"That is a well-known fact, so well-known that it may not be true at all."

. . . The Red Queen said to Alice.

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APRIL, 1972

VOLUME 55, No. 4

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COVER: Hospital sign exhibiting no smoking symbol. One of 39 new symbols and photographs identifying various hospital functions and services, currently being introduced in New York City's municipal hospitals and health facilities.

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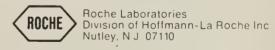
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have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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- George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

play a role in drug regulation?

Results of a questionnaire to 7000 physicians:

82.8%

Physicians should play a role

78 3%

Independent scientists should play a role

69.8%

Medical academicians should play a role



Doctor of Medicine

Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the

Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete informa-

tion. If not, much of what the medical community and federal regulators do will often be represented in simplistic and somewhat misleading terms.

One illustration of the misuse of the media in this regard is the recall of anticoagulant drugs several years ago. This FDA action was given publicity by the press and television that went far beyond its probable importance. The result was a very uncomfortable situation for the practitioner who had patients taking these medications. Since the practitioner and pharmacist had not been informed of the action by the time it was publicized, in most states they were deluged with calls from worried patients.

The practitioner can attempt to solve these problems of inadequate communication in several ways. One would be the creation of a communications line in state pharmacy societies. When drug regulation news is to be announced, the society could immediately distribute a message to every pharmacist in the state. The pharmacist, in turn, could notify the physicians in his local community so that he and the physician could be prepared to answer inquiries from patients. Another approach would be to use professional publications the practitioner receives.

All of this leads back to my opening contention: if drug regulation is to be effective, timely, and related to the realities of clinical practice, a better method of communication and feedback must be developed between the nongovernmental medical and scientific communities and the regulatory agency.

Maker

Henry W. Gadsden, Chairman & Chief Executive Officer, Merck & Co., Inc.

In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a lawand regulation-making process that can have farreaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practic-

ing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and represen-



tation in government affairs Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in proving precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to

make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted prima facie as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines

that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings-where everyone with an interest and a capacity to contribute has an opportunity to be heard ... and, if that opportunity is not spontaneously afforded him, he may

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tension in patients who received related drugs. **Drug Dependence** Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal. **Usage In Pregnancy** The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under

Precautions In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overare most often manifested as drowsiness or sedation or over-stimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. Cardiovascular: tachycardia, palpitation, elevation of blood pressure. Gastrointestinal: nausea and vomiting, diar-rhea, unpleasant taste, constipation. Endocrine: changes in libido, impotence. Autonomic: dryness of mouth, sweating, mydriasis. Allergic: urticaria. Genitourinary: diuresis and, rarely, difficulty in initiating micturition. Others: Paresthesias rarely, difficulty in initiating micturition. Others: Paresthesias, sural spasms.

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The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestirial symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive

pathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

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(ETHNIC MEDICINE)

Pancreatic Calcification in Nigeria

The average age of 45 patients showing pancreatic calcification was 20.4 years; 31 were under 20 years of age. It is thus a disease of younger persons in western Nigeria, whereas in western Europe and the United States, it is a disease of middle age. Males and females were about equally affected, whereas in France, Britain, and North America males predominate. Symptoms of diabetes mellitus were the presenting feature in 82 per cent of cases. No patient was addicted to opiates or alcohol and chronic relapsing pancreatitis was rare. Protein malnutrition was the probable cause in most cases.

. . . E. O. Olurin and O. O. Olurin: *Brit M J* 4:534, Nov 29, 1969

* * *

Carcinoma of the Esophagus in India

The incidence in India is 14.4/100,000 men and 11/100,000 women, the highest of any country in the world. The results of treatme Japan, where the incidence is also high, are much better than in India. The results in India do not differ greatly from those in the United States. The wide demographic differences in incidence and in malignant potential are not explained.

... P. B. Desai, et al.: Cancer 23:979, April 1969

The results in India do not differ greatly from those in the United States. The wide demographic difference, in incidence and in malignant potential are not explained.

. . . P. B. Desai, et al.: Cancer 23:979, April 1969

Prevalence of Gallbladder Disease Among Chippewa Indians

Recent reports have suggested that the prevalence of biliary tract disease is higher among American Indians than other population groups. To determine whether there is a high frequency of gallbladder disease among the Chippewa Indians in Northern Minnesota, a review of medical records of all patients seen at the Cass Lake Hospital on the Leech Lake Reservation was undertaken in January 1968. A high prevalence of gallbladder disease, comparable to that previously reported for other groups of American Indians, was found (Continued on Page 111)

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and was significantly higher among both sexes than that reported for Framingham Caucasians. The prevalence rate among Indians 20 years old or older was approximately 9 per 100, and the rate for women was four times that for men. Pregnancy was associated with a higher prevalence of symptomatic gallbladder disease in Indian women, especially among those less than 30 years of age. Women with more Indian heritage had a higher prevalence of the disease than women with less Indian heritage; this was not true for Indian men. . . . J. L. Thistle, et al.: Mayo Clin Proc 46:

6033, Sept 1971

Hodgkin's Disease in English and African Children

The histologic classification of Hodgkin's disease based on the Rye Conference was applied to lesions in children in the Manchester region of England and those in East Africa. African children seem to have more lesions of the lymphocytic depletion type, which has a less favorable prognosis. The same difference is apparent when comparing lesions in children from France and Texas. There

explanation for this finding, but the authors suggest that it may indicate that there is a less favorable reaction to the disease among African children.

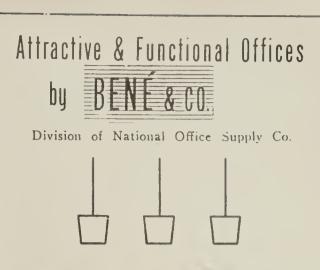
. . . C. Burn, et al.: J Nat Cancer Inst. 46:37, 1971

Cystic Fibrosis: Cell Culture Studies on Danish Population

Skin fibroblast cultures were established from 49 patients with cystic fibrosis from 45 unrelated families from Denmark. The three distinct morphological phenotypes (I, vesicular, 11 generalized (vesicular-granular-cytoplasmic), and III, ametachromatic) previously reported to occur in cultures from the American population were seen in the cultures from the Danish population. The distribution of these classes in the Danish population was significantly different from that in the American population. No distinct relationship between the clinical manifestations and the different cell culture classes was observed. However, the age at which the initial diagnosis of cystic fibrosis in the propositus in each family was made was earlier in class III than in the other two classes.

... Danes BS and Flensborg EW: Amer J Hum Genet 23:297-302, May 1971

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Robert E. Snell, M.D. 12516 Eastbourne Drive Silver Spring, Maryland 20904 Internal Medicine

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Peripatetics

BANICE FEINBERG was recently honored as retiring chief of staff in pediatrics at Rhode Island Hospital by that department. A resolution extending sincere gratitude to Doctor Feinberg for the medical excellence which he has brought to the people of Rhode Island and wishing him well upon his retirement was adopted by the Senate in Rhode Island General Assembly.

* * *

At the annual meeting of the Rhode Island District Branch of the American Psychiatric Association, PATRICIA WOLD was elected president; HUGO TAUSSIG, vice president; DORIS BERGER, secretary-treasurer; and JACQUES MIONI, councillor.

* * *

Colonel PETER C. H. ERINAKES, recently retired as commanding officer of the 455th General Hospital, a U. S. Army Reserve unit, at Cooper Reserve Center, Warwick.

Colonel Jean Maynard, assumed command of the group. Doctor Erinakes has commanded the 455th for the last decade. He is also retiring as chief of staff at the Kent County Memorial Hospital of which he was one of the founders.

* * *

HENRY C. McDUFF, surgeon-in-chief of the department of gynecology at Rhode Island Hospital, was installed President of the Obstetrical Society of Boston at its recent annual meeting.

THOMAS PERRY, JR., of Providence is a member of the Board of Governors of the American College of Surgeons. HENRY T. RANDALL of Providence is a member of the Pre-and postoperative Care Standing Committee of the College of Surgeons.

Members of the state advisory committee include: ARNOLD PORTER, of Providence, Chairman; WILLIAM F. GARRAHAN, Warwick; STEPHEN J. HOYE, Pawtucket; CHARLES B. ROUND, Warwick; and LESTER L. VARGAS, Providence.

* * *

PERRY GARBER of Cranston, DCR, REYNOLD T. LARSEN MC, USN of Newport, and SZE K. KAAN of Warwick have been admitted as new members of the American College of Physicians.

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The Present And Future Of Medical Practice In Rhode Island

State Is A Unique Laboratory For The Study Of Various Systems Of Medical Care Delivery

By William J. MacDonald, M.D.

As I come to the end of my term of office as President of the Rhode Island Medical Society the time has arrived for me to recount some of the problems facing organized medicine today, to report to you on our activity during the past year, and to make some recommendations for the future.

The pressure for a national health insurance plan has been building up over the past several years. The plans proposed range all the way from the revolutionary Kennedy-supported plan which would scrap our entire medical care delivery and financing system and start anew with a monolithic, rigid 80 billion dollar plan, to the American Medical Association plan which would substantially change only the financing of health care.

EXPERIENCE OF GREAT BRITAIN

We can profit by the experience of Great Britain where there is a fully-controlled government health care delivery system. A recent series of articles in

WILLIAM J. MACDONALD, M.D., of Providence, immediate past president, Rhode Island Medical Society, Chief of Obstetrics, Providence Lying-In Hospital, Providence Rhode Island.

Delivered at 161st Annual Scientific Assembly of the Rhode Island Medical Society, March 15, 1972 at Providence, Rhode Island. the local Providence paper point out that in Great Britain most patients are accommodated in twenty or thirty bed wards, and the standard of hospital accommodations are much lower than in the United States. Other criticisms cited in the newspaper articles were directed to the family physicians in England, who provide 90 per cent of the medical care, stating that "Family doctors find it difficult to keep up with medical knowledge because they have been removed from the hospital and are in effect relegated to second class professional status. Many family doctors are operating from antiquated, ill-equipped and under-staffed quarters."

The lower incidence of hospitalization in the government hospitals in Britain is cited as an advantage of the British plan. However, the fact that no new hospital was built in England in the first twelve years of the plan, and very few since, would indicate not lower utilization of hospitals but rather unavailability of hospital beds. The average wait for elective surgery in England is two years and many people go to non-government facilities rather than wait that long.

MISUSE OF FACTS

The criticisms of American medicine by politicians and news media have increased in volume (Continued on Next Page)

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and decreased in respect for facts as we move into an election year. In their urgency to create a health care crisis some of the critics have disregarded common sense, truth, and sound statistical analysis of their material. We are told that a large segment of our population must go without medical care because it is not available. Yet a survey done in Rochester, New York, revealed that over 99 per cent of the people surveyed knew exactly where to seek medical care.

The most commonly quoted figure for a comparison of the quality of medical care is the infant mortality rate. The United Nations Demographic Yearbook ranked the United States thirteenth in infant mortality. However, the introductory chapter of the U.N. Yearbook warns specifically that infant mortality rates should not be used for comparison because of the wide variation of the definitions of infant mortality. In the United States a fetus is listed as a live birth and therefore subject to be listed as an infant mortality if prior to death any sign of life is detected, even a heart beat or muscle twitch. In some countries an infant death is not counted in the statistics unless death occurs after the birth has been registered. In some countries the responsibility for registering births rests with the parents rather than with the doctor, and many birth go unregistered, particularly if the babies die within the first few hours of life. In fact, infant mortality is more a measure of social problems such as poor nutrition, poor housing, ignorance, and poverty, rather than primarily a measure of the quality of medical care.

Another commonly quoted index of the quality of health care is the overall life expectancy. Again we are at a statistical disadvantage because of nonmedical factors. These figures are not corrected for the inordinate numbers of people who die in this country as a result of automobile accidents, some 54,000 last year, or those who die of drug connected causes, as war casualties, and in other violent circumstances. No correction is made for the large number of deaths due to self destructive living habits of the Americans, such as dangerous eating habits, smoking, excessive drinking, lack of exercise, and high pressure emotionally stressful living.

HOSPITAL COSTS

The high cost of health care is usually placed at the physician's door step even though the physician's fee represents only about 13 per cent of medical care costs. The major portion of the in-

creasing cost of medical care is for hospital services. As the salaries of hospital employees increase we can expect a further increase in costs of hospital care. But who can deny that the hospital employees have been among the lowest paid in our whole economy and that it is only proper that their income should be brought up to the level of comparable workers in other industries. Many unionized workers such as carpenters, plumbers, and electricians would have net incomes greater than many doctors if they were to work the sixty to seventy hours per week throughout the year that the average physician works. Physicians' fees over the past three years have risen at almost exactly the same rate as the average earnings of workers on private nonagricultural payrolls; yet recently physician fee increases have been frozen at less than one half the rate of increase for salaried workers. If this inequity is allowed to go on, many physicians will be forced into salary type practices just to keep abreast of the controlled inflation of other segments of the economy.

NEW EXPERIMENTS IN RHODE ISLAND

On the local scene during the past year we have seen the advent of several new methods of medical care delivery in Rhode Island. The long awaited Rhode Island Group Health Association, the union sponsored prepaid plan, began operation nine months ago. Its acceptance by the rank and file of union workers appears to have been much less than expected. As of January 1, 1972 the plan had sold 901 contracts with the largest number being employees of the City of Providence. However, the enrollment in the plan is still increasing, and it is too early yet to determine the effect of the union plan on medical care delivery in Rhode Island.

The Providence Neighborhood Health Centers, Inc. has risen like a phoenix from the ashes of the discredited Progress for Providence Neighborhood Health Center program. However, although the new program has been funded with two million dollars in Federal money, it is still able to provide medical care for only a few hours a day and its patients must seek emergency and night care from the private physicians or accident rooms in the community. The Board of Directors of the new project suffers from the same interregional power struggle and political interference which caused the Progress for Providence project to fail.

A group of physicians has recently begun so-

liciting members for a prepaid group plan centered in the Bristol Health Center and administered through the Rhode Island Blue Cross and Blue Shield plans. This plan is unique in that it is sponsored and controlled by physicians without government subsidy. Any financial loss, if the plan does succeed, will be borne by the physicians rather than by the Federal Government. There are several other groups of physicians who are considering establishing similar prepaid group plans. If the Bristol plan succeeds, it will have an important influence on the direction which medical care delivery in Rhode Island will take in the future.

Also during the past year the Rhode Island Hospital has sponsored a group plan as a pilot project and as a possible forerunner to a much larger plan to be put into effect when the ambulatory care center in Rhode Island Hospital will be finished. This Federally-supported project depends on nurses for follow-up medical care for a selected group of clinic patients who are initially seen by a physician and whose care is outlined by the physician.

All of these plans together provide care for less than one per cent of the population of Rhode Island. The overwhelming portion of medical care in our state is being provided by private physicians without government subsidy or public notice, except for an occasional criticism.

LEGISLATION

Your Medical Society has been active in expressing to the legislature the opinions of organized medicine on any bills that have a bearing upon the health of the people of Rhode Island. Early in the year we were successful in bringing about a modification of a new medical licensing act which would have permitted some chiropractors to practice in Rhode Island without taking any local examination. We were unsuccessful after expending much time and effort in opposing a bill granting the privilege of using drugs to optometrists. The Rhode Island legislature is the first one in the country to establish this dangerous precedent.

Mr. John E. Farrell, Executive Secretary of the Rhode Island Medical Society, and I testified at a hearing before the Director of Business Regulation on a request by one of our largest medical malpractice insurers for a 59 per cent increase in premiums. The increase was not granted.

The Society also has been well represented at national meetings of the American Medical Asso-

ciation and at several AMA sponsored conferences on such timely subjects as peer review, medical foundations, and extended care facilities.

PEER REVIEW

An important development in the past year has been the extension of our county peer review committees to a statewide peer review mchanism which has ben set up with the firm purpose of maintaining close surveillance of the quality, utilization, and cost of medical care rendered or ordered by the physicians of Rhode Island, This committee is accessible to patients, third party payors, physicians, and other health providers. The committee is not intended to usurp the responsibilities of the utilization review committees of the various hospitals. In Rhode Island all of our general hospitals subscribe to a statistical service which reports on how each hospital and each physician compares with other hospitals and physicians in various parameters of medical care. A few hospital staffs make use of these data, but many do not. The state peer review committee will act as a stimulus to hospital staffs to utilize, evaluate fairly, and respond positively to these statistical data obtained from the nationally conducted surveys. It will also act as an appeal mechanism for evaluating possible disputes at the hospital level.

Severally Federally sponsored studies are now under way in Rhode Island to analyze the various aspects of medical care in our state. The Medical Society is anxious and ready to assist in the interpretation of the results of these surveys and to bring about changes where indicated. A strong peer review committee of physicians with a staff capable of translating the computer print-out material into comprehensible language will do much to counteract the common criticism that doctors are doing nothing to control the cost, quality and utilization of medical care.

M.D. AT BROWN UNIVERSITY

In September of 1971 your House of Delegates passed a resolution urging the President of Brown University to proceed with the establishment of an M.D. granting medical school. Following the example of your previous President, Doctor Richard P. Sexton, I have been actively engaged in supporting medical education at Brown. I have tried to make it clear in public statements that medical care in Rhode Island has been good for many years and would not be significantly dimin-

(Continued on Next Page)

ished without a medical school; however, the opportunities for providing even better care, better training, and better access to medical education and the opportunities to increase the supply of well-trained physicians in Rhode Island would all be enhanced by a medical school. The controversy within Brown University over the establishment of a medical school has been resolved. However, many of the citizens of Rhode Island question the advisability of supporting education in a private institution and have suggested that a medical school be established at the Unversty of Rhode Island. The states of Massachusetts and Connectcut have invested over one hundred million dollars in recent years in establishing state medical schools, and the end of the spending is not yet in sight; and these schools have yet to graduate a single medical doctor. The Rhode Island legislature has a rare opportunity for a tremendous bargain in medical education which they can have for a maximum investment of \$500,000 a year in state support of educating Rhode Island residents in medicine at Brown.

Brown University had a medical school until 1827, at which time a ruling by President Francis Wayland requiring all faculty members to live on campus forced the closing of what would have been today the third oldest medical school in the country. The corporation, faculty, and administration at Brown in 1972, after much deliberation, have recognized the value of proceeding with the M.D. granting program and have recommended that the University do so provided that state financial support is made available. The responsibility of the final decision on medical education in Rhode Island now rests with our state legislature.

MANPOWER PROBLEMS

Physician manpower is only one facet of the much larger problem of the shortages in almost all of the other health care fields in Rhode Island. The shortage of nurses is well-documented by various surveys, but other paramedical personnel, such as laboratory and x-ray technicians, physiotherapists, and occupational therapists, are also in demand. The training and allocation of such personnel is now on a hit or miss basis. Colleges, hospitals, junior colleges, technical schools, high schools, and individual physicians are now providing the training for these people with little regard for relative need in the community or for uniform quality control of their education. The

public institutions of Rhode Island have 18 paramedical training programs; the private colleges have five such programs; by next fall there will be seven health training programs in the high schools of the state sponsored by the Office of Vocational Education. Also many informal programs for inhalation therapists x-ray technicians, laboratory technicians, and nurses' aides are being conducted in the various hospitals. Doctor Heber Youngken, Dean of the College of Pharmacy at the University of Rhode Island, speaking at this meeting last year, recommended that Rhode Island establish a health sciences education center which would serve to coordinate the training and allocation of paramedical personnel in a rational manner based on shortages in the various fields. Such a center would be responsible for the standardization of the quality of training and performance of paramedical personnel. Doctor Youngken visualized a health sciences education center as a consortium of health care providers, educators, and administrators of health manpower training programs in Rhode Island. Such a health sciences education center plan, based on Doctor Youngken's recommendations and on similar plans in other communities, has already received preliminary approval from the Rhode Island Advisory Committee to the Tri-State Regional Medical program. All of the agencies which may be involved in such a center should give this plan their full support and cooperation.

MEDICAL SOCIETY STRUCTURE

At the Medical Society level during the past year, we have made several changes in our bylaws and we are contemplating others. Interns and residents are now eligible for full membership in the Rhode Island Medical Society and further changes are contemplated in the committee structures in an effort to provide a more efficient and more responsive organization. I should like to recommend that not only the committee structure be simplified but that serious consideration be given to revising the makeup of the House of Delegates to provide for representation of the various specialty societies in Rhode Island. With the increase of specialization in recent years, the interests of physicians of our state have come to be centered more in their specialty societies than in their district medical societies. Just as the national specialty societies have representatives in the AMA House of Delegates, I feel that repre-

(Continued on Page 136)

I. The Physician's Role: The Physician's Responsibility To His Smoking Patient

Physicians Must Become More Deeply Involved If We Are To Keep The Gains

By Jesse L. Steinfeld, M.D.

I appreciate very much this opportunity to discuss with you the role of the physician in relation to his patients who are smokers. I have long been concerned, not only as Surgeon General and as the Public Health Service's representative to the National Interagency Council, but as an individual, about the failure of the medical profession, as a whole, to do something about the smoking and health problem. Physicians and other health personnel must become more deeply involved if we are to keep the gains that we have made in the years since the 1964 Smoking and Health Report. Seminars of this type are most urgently needed and I trust that many more will be organized by medical societies and interagency councils throughout the country.

I do not think that anyone will challenge the concept that the medical profession does have a responsibility — or to put it more strongly — an obligation to take a positive role in the smoking and health picture. Patients do look to their physicians for help in solving their smoking problems. We know this from responses to a survey made a few years ago by the Public Health Service. About two out of three persons interviewed agreed that it is the doctor's job to convince his patients to stop smoking. Another important fact that emerged from the survey was the belief on

JESSE L. STEINFELD, M.D., Surgeon General, Public Health Service, U.S. Department of Health, Education, and Welfare.

Presented at the Rhode Island Interagency Council on Smoking and Health. Warwick, Rhode Island, January 14, 1972. the part of lay people that doctors should set a good example by not smoking and by being active in community programs involving the general public and by speaking about the health hazard of smoking. Three quarters of those interviewed felt that physicians should help the patient who wants to quit.

PHYSICIAN'S ADVICE INFLUENTIAL

But the clincher in this survey was the fact that 84 per cent of the people questioned believed that most patients will not quit unless the doctor tells them to. This response offers the medical profession a most tremendous challenge, for it opens the door to an opportunity to practice a most useful, personal kind of preventive medicine.

But have the nation's physicians risen to this charge? I am sorry to say that it appears they have not. It is true that physicians themselves have a good record on giving up smoking, better, indeed, than their colleagues in other branches of the health field. We estimate that only about 30 per cent of our doctors are currently smoking cigarettes, while about 36 per cent have given up the habit. In contrast, 34 per cent of the dentists are current smokers and 32 per cent have quit; 335 per cent of the pharmacists are smokers with 30 per cent of them ex-smokers; and among the nurses, 37 per cent are still smoking while only 22 per cent have given up the habit.

We can safely assume that physicians have given up smoking because of their concern about the health hazard involved — yet they are not advising their patients to take similar steps unless

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the patient has a specific complaint that may be associated with his smoking habit. A number of years ago a survey conducted by the National Opinion Research Center revealed that while most physicians do recognize the health hazard of cigarette smoking and do feel responsible for changing their patients' smoking behavior, a relatively small proportion — 38 per cent — indicated that they advise *all* of their patients to quit or cut down. In contrast, high proportions of the physicians said they advised cessation when the patients had pulmonary conditions, peripheral vascular disease, heart conditions, peptic ulcers, or mouth or lip lesions.

Although the data from this particular survey are about five years old we believe that the general picture has not changed much. According to the most recent survey of public attitudes toward smoking, made in 1970, a high percentage of respondents said that their physician did not discuss the hazard of smoking with them. Incidentally, this same survey showed that 69 per cent of males interviewed and 78 per cent of females agreed that doctors should set a good example by not smoking.

I certainly would hope that all physicians would recommend cessation in cases where cigarette smoking might be a contributory factor to the patient's condition. But I do not understand why they do not advise cessation for all patients who smoke. If they practice preventive medicine on themselves, why do they not offer their patients the same quality of preventive care?

ACTIVE ROLE ESSENTIAL

Perhaps there is an element of pessimism about the prospects for success. It is one thing to tell a patient to undo the habit of a lifetime; and quite another to have him happily follow this advice. I am sure that many a physician prefers not to raise the subject at all rather than have his patient come back and say "Doc, I tried, but I just can't do it. Help me." What does he do then? How can he help this person? Unfortunately there is no convenient medicine that he can prescribe. or even a regimen that can be followed by all people with the same hope of a successful outcome. For some people giving up smoking is an extremely difficult matter. This is particularly true of those who are heavy smokers. The more one smokes, the harder it is for the habit to be broken. Women seem to have a harder time than men in quitting, and more go back to smoking after their

initial try at cessation. On the other hand, quitting is a relatively easy matter for others. All they need is the encouragement to make the break.

Another reason some physicians may feel reluctant to advise the non-symptomatic patient to stop smoking may be the lack of any convincing arguments or methods of demonstrating the health hazard of smoking. The man or woman who feels well and has not any particular medical problem is not going to be convinced very easily that smoking is bad for him.

Certainly there may be some concern on the part of physicians that an edict to quit smoking may actually create a medical problem rather than cure one. The patient who is highly addicted to cigarettes may find that giving them up leads to nervousness and irritation that can be quite difficult to cope with.

Whatever the arguments, no physician has a right to "cop out" on the smoking issue. There are a number of things I believe the physician can do in order to fulfill his responsibilities in this area. First, he should determine who the smokers are among his patients and something about their smoking habit. With new patients this can be done quite unobtrusively when medical histories are taken. Among old patients, some will identify themselves quite readily as smokers; others may have to be asked directly.

HAZARDS ENUMERATED

Once he has identified his smoking patients, the physician should make a point of discussing the health hazard of cigarettes with them. He should also discuss smoking with any young patients he might have even though they may not yet be smokers. The chances are high that they might take up the habit, particularly if there are other members of their family who smoke. Every physician should know the basic facts about the health hazard of smoking. Even though it is not always possible to quote the percentages exactly it is not difficult to remember the major findings of the various smoking and health reports which have been reaffirmed year after year:

Cigarette smoking is associated with higher over-all death rates.

Cigarette smoking is causally related to lung

Cigarette smoking is considered the major cause of chronic bronchitis and contributes to death from this disease and from pulmonary emphysema.

Cigarette smoking plays a major role, along with other risk factors such as hypertension and hypercholesterolemia, in the development of coronary heart disease.

These three areas represent the major killers and cripplers of our nation. Heart disease is number one. One million people in this country suffer heart attack or experience death from coronary heart disease every year.

Our second greatest killer is cancer. In light of the recent decision by President Richard M. Nixon to increase our efforts to eradicate this disease, it is especially important that we increase our efforts to reduce the toll taken by lung cancer, which it is estimated will kill more than 68,000 men and women in 1972. Chronic bronchopulmonary disease is doubly menacing. Not only do some 30,000 men and women die each year from chronic bronchitis and emphysema, but untold numbers are forced into retirement at their most productive time of life, doomed to years of struggling for breath.

Now these are not the only diseases associated with cigarette smoking although they certainly are the ones that most people remember. There are in addition oral cancers — those of the lip, tongue, floor of the mouth, hard and soft palate, alveolar mucosa, buccal mucosa, and oropharynx; cancer of the esophagus and of the larynx; and cancer of the urinary bladder and kidney. Smoking is associated with peptic ulcers, and with cerebrovascular and peripheral vascular disease.

A most important point which we are stressing in our current anti-smoking program is the effect of smoking on the outcome of pregnancy. We learned in the past that women who smoked during pregnancy tended to have babies weighing less than normal average. Our most recent reports on the health consequences of smoking reaffirmed this fact and further indicated that smoking mothers appear to have a greater number of unsuccessful pregnancies due to stillbirth and neonatal death.

Add to this the fact that smokers suffer more acute and chronic illness than nonsmokers and lose more time from work and you can see that the health consequences of smoking are of considerable magnitude.

INFORMATION IS AVAILABLE

These are all facts that your patients should know. You don't have to remember all the specifics, for all of this information is available in pamphlets which you can get from a variety of sources. I would assume that those of you here today have probably already availed yourselves

of the materials distributed by the Rhode Islan Interagency Council. You most certainly can get all that you need from the National Clearinghouse for Smoking and Health, the National Interagency Council on Smoking and Health, and the Cancer, Heart, and Tuberculosis associations.

Now, in order to make the advice to give up smoking truly meaningful, the physician must create a climate that is supportive of his efforts - in effect, a smoke-free atmosphere. I firmly believe that no physician should allow smoking anywhere in his office or clinic. It makes no sense at all to preach about the dangers of this habit on the one hand, while tacitly encouraging it on the other by providing convenient ashtrays in the waiting room. By the same token, sale of cigarettes in canteens or through vending machines should not be allowed in any medical facility. I realize there will always be the person who is nervous about his own condition, or perhaps that of a patient he is waiting for, and he may feel he has a right to smoke to allay his tensions. But I insist that the non-smoker, whether or not he is suffering from a respiratory, heart, or allergic condition, has an equal right to breath air that is free of pollutants. And of all places, the doctor's office should provide this kind of atmosphere.

I know that my views on this particular problem are shared by many. After I proposed a Bill of Rights for Non-smokers last January, I was literally deluged with letters from people in all walks of life, health professionals, lawyers, university professors, as well as ordinary citizens, endorsing my views. A good many of these people specifically called attention to the need for some kind of no smoking regulations in physicians offices and in hospitals.

SMOKING RESOLUTION ADOPTED BY HOUSE

The House of Delegates of the Society adopted the following resolution on Smoking in Places of Public Assembly at its March 8, 1972 meeting:

"Whereas smoking in public auditoriums and similar meeting places results in discomfort, and adverse physical reactions, for many in attendance at public affairs held at such meeting sites, therefore

Be It Resolved that the House of Delegates of the Rhode Island Medical Society urge that smoking in the main or central area during events at any public auditoriums or arenas be prohibited. and further, that such ruling be enforced when the new Providence Civic Center, now under construction, is opened to the public."

(Continued on Next Page)

BAN SMOKING IN DOCTORS' OFFICES

Undoubtedly many physicians throughout the country have already taken steps to ban smoking in their offices, but I should like to see this a universal movement. Signs which politely suggest that for the sake of others and the individual himself smoking is not allowed are available from a number of organizations and private businesses. The American College of Chest Physicians has such a sign. The American Medical Association has both a desk plaque which says "No Smoking Please" and a wall plaque which can be purchased for a nominal sum. The American Dental Association likewise has No Smoking Signs. I had a generously proportioned sign made up for my office which reads "In keeping with the policy of this Department and the Public Health Service we are trying to eliminate smoking from this office. Your cooperation will benefit you." If printed signs are not readily available, I would imagine a talented member of the physician's staff could devise something appropriate along these lines.

The "no smoking" rule most certainly should apply to the entire staff, while they are on duty, as well as to patients and others in the waiting room. It would be hypocrisy of the highest order if it did not. Indeed, all members of the health team — nurses, technicians, health aides — have the same responsibility as the physician to encourage people not to smoke and to create an atmosphere appropriate to this concept.

As you may know, Secretary Elliot L. Richardson recently announced that he plans to take steps within HEW to protect the rights of the non-smoker. These include the establishment of no-smoking areas in cafeterias, a no-smoking policy in conference rooms and auditoriums, and the establishment of no-smoking work areas wherever possible. It is hoped that if this policy is successful, other Federal agencies and private industry will follow suit.

DISCOMFORT AND ALLERGIES

There is, of course, valid scientific reason for banning smoking in public places. Although we cannot say with certainty that exposure to tobacco smoke can cause serious illness in nonsmokers, it is clear that such exposure can contribute to the discomfort of the nonsmoking individual and can exacerbate allergic symptoms in those who suffer from allergies of various types. Furthermore, research has shown that exposure to heavy concentrations of carbon monoxide, such as you might find in a room heavy with tobacco smoke,

can impair performance, alter auditory discrimination, visual acuity and the ability to distinguish relative brightness. I do not suggest that your reception rooms resemble the smoke-filled back rooms at a convention, but we must be sensitive to the fact that even a moderate amount of smoke in the room can be hazardous to the patient who is already suffering from heart disease or respiratory disorders.

The anti-smoking measures I have suggested all involve communication — verbal or visual advice to give up smoking. I do not intend to minimize the importance of the physical examination as a tool in this educational process. In addition to his usual examination procedures the physician may want to include screening tests to detect evidence of early impairment or possible disease in smokers, particularly those who are over 40. We know, from our epidemiological data, that men in their 40's and early 50's who are smokers have the highest overall mortality ratios of any age group. Of the various tests available to today's practicing physician those involving the measurement of lung function seem to me to be among the most useful devices to demonstrate the hazard of smoking. Spirometry readings, which can be taken in the office, can not only show the smoker what smoking is doing to his body, but can be used to show improvement after smoking stops.

HIGH RISK PATIENT

In addition to screening for early impairment the physician may also want to identify the patient who is at high risk for diseases related to smoking and give him more concentrated, and if necessary persistent counseling. A very good example is coronary heart disease. As you know, certain biological and behavioral characteristics that make men prone to coronary heeart disease have been identified. These so-called risk factors include overweight, lack of exercise, family history of heart disease, diabetes, hypertension and high blood cholesterol, and, of course, cigarette smoking. Any one or a combinaion of these factors increases the individual's risk of heart disease. But the three most important are smoking, hypertension, and hypercholesterolemia. The National Cooperative Pooling Project, which included six major prospective studies involving several thousand middle-aged American men, revealed that those men free of these three risk factors experienced much lower coronary heart disease morbidity and mortality rates over a ten-year period than did the groups of men with any two, or all three factors. In fact, the risk-free men had a mortality rate one-fifth that of the men who had all three factors of smoking, hypertension, and high cholesterol.

It is obvious that if these factors could be controlled, there would be a substantial reduction in the mortality and morbidity rates for coronary heart disease. The same would be true of other smoking-associated diseases. The dividends from such measures would be two-fold. The immediate effect would be to extend the patient's lifespan and spare him and his family the anguish and financial burden of long-term illness or death. Of even greater consequences in the long run would be the benefits to society as a whole by easing the strain on our medical care facilities.

CONTRIBUTION TO HEALTH CARE

All of us in the health field — whether in private practice or in the service of the government - share a concern over the status of health care in this country. We are disturbed at the rising costs of medical services, the shortage of hospital beds, the lack of intensive care facilities for cardiac and respiratory cases. I don't think there is any question that the solution to these problems is going to come through the broadened practice of preventive medicine. And the simplest and most effective form of preventive medicine we have today is counseling against cigarette smoking. The physician needs little more than his usual office equipment; he has the backing of the major medical and health associations in the country. The most important element in this program is the willingness to take the extra time to talk about the hazard of smoking and to give the help that

is needed to get the patient off cigarettes and keep him off.

This counsel should extend beyond the walls of your office, however, for, as I noted earlier, the public expects the physician to be active in community anti-smoking programs. The fact that you are attending this seminar indicates that you have already accepted this responsibility.

COMMUNITY SERVICE

Such community service is, of course, yet another way in which the physician can practice preventive medicine. Fraternal and civic clubs, educational and youth groups are potential audiences for a good straight-forward presentation on smoking. I might warn you, however, that our research program in San Diego found that women's clubs are not too eager to be told that they should give up smoking. Nonetheless, the fact that a physician is talking about the health hazard of smoking will give credence to the information adults have been receiving in their reading and on television and youngsters have been getting in school health education programs. If the doctor says it, it must be true.

What will be your success rate? That no one can predict. There are always the few who will insist to the last that no one, particularly not the government, is going to tell them what to do with their lives. But there are others who need only your good advice to convince them that cigarettes are something they can do without. Surely the fact that 30 million Americans have given up smoking proves that it is not all that impossible. In terms of the benefits to the individuals and to the nation as a whole, it is worth the try.

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II. The Public's Responsibility: A Bill Of Rights For The Non-Smoker

We Must Free Non-Smokers From The Annoyance And Hazards Created By Those Who Smoke

By Jesse L. Steinfeld, M.D.

The subject tonight is "A Bill of Rights for the Non-Smoker," and New England is the best of all places to be when you are talking about such a concept. The history of our country started here with the search for freedom. Perhaps 1972 will be a year of significance when the history is written of our attempt to do something about the problem of smoking and health, and our attempt to free the non-smoker from the annoyance and hazards created by those who smoke.

As a non-smoker, and as a physician, I have wondered for many years at the patience of the non-smoker. A generation ago, as I remember it, the rules about non-smoking were much better observed in theaters, in public transportation, and in work areas than now. There was also some element of courtesy observed by most smokers. But gradually, cigarette smoking became more socially acceptable, the number of smokers increased, and women began to smoke in larger and larger numbers. And the haze of tobacco smoke settled down upon our country.

HAZARDS OF POLLUTION

A year ago I had occasion to discuss this sub-

JESSE L. STEINFELD, M.D., Surgeon General, Public Health Service, U.S. Department of Health, Education, and Welfare

Presented at dinner meeting of the Rhode Island Interagency Council on Smoking and Health, Warwick. Rhode Island, January 14, 1972.

ject. Let me repeat what I said before the National Interagency Council on Smoking and Health last year:

Evidence is accumulating that the non-smoker may have untoward effects from the pollution his smoking neighbor forces upon him. Non-smokers have as much right to clean air and wholesome air as smokers have to their so-called right to smoke, which I would redefine as a so-called 'right to pollute.' It is high time to ban smoking from all confined public places such as restaurants, theaters, airplanes, trains, and buses. It is time that we interpret the Bill of Rights for the Non Smoker as well as the Smoker.

The reaction to these remarks surprised me and pleased me. I received hundreds of letters from all parts of the country, from smokers as well as non-smokers, expressing appreciation and gratitude for bringing the matter to public attention. Many of the letters were quite touching. Some writers told how they suffer in restaurants and buses and planes when people around them smoke. Others told how they had to curtail travel and social activities because of allergies and respiratory conditions which are aggravated by tobacco smoke.

NON-SMOKERS IN MAJORITY

There are, as you know, many more non-smokers than there are smokers — something like 58 per cent of adult men do not smoke, and something

like 70 per cent of adult women do not smoke. But these non-smokers, at least until now, have been a very silent majority, probably because they were afraid to speak out in defense of their right to breathe unpolluted air or for fear of being taken for cranks or neurotics. It is gratifying to know how strong a sentiment there was and is fora change, given this chance to express it.

The proposal to ban smoking in confined public places also inspired a good deal of comment in newspaper editorials and by columnists. Most editorials which came to our attention were favorable to the proposal; some were noncommittal; a few were downright hostile. The dissenting editors described the idea in such terms as "unwarranted," "unrealistic," "pernicious," "a step toward government control," and so on. One editor said that if the Surgeon General wanted to make it a crime to smoke in public, he was puffing up the wrong tree. A syndicated columnist wrote, "our lungs are our own damned business," and not the business of the Surgeon General.

I think that some of the emotion behind such criticism was generated by the fear of undue interference by Government with the private lives of the citizen. However, it is only too true that smoking brings tragedy to families. It is true, as President Richard M. Nixon pointed out in his Health Message last year, that non-smokers subsidize those who smoke through tax payments and through insurance premiums. And it is also true that the right to smoke is an individual right, and that the decision to smoke or not is a personal decision.

We grant this, but we can go on to say that we need a better balance between the 35 per cent of our population who smoke, and all of us, smokers and non-smokers alike who wish to breathe clean air.

REPORT TO CONGRESS

We have recently published and sent to the Congress a new report on the Health Consequences of Smoking. An important section of this report is devoted to a review of what we know about air pollution brought about by tobacco smoke.

Although we cannot say with certainty that exposure to tobacco smoke is causing serious illness in non-smokers — the long-term research necessary for such a finding has not yet been done — our 1972 review makes perfectly clear that such exposure can contribute to the discomfort of the non-smoking individual and can produce exacerbation

of allergic symptoms in those who are suffering from allergies of various other causes. There is ample proof that those who complain of discomfort in smoke-filled rooms are not disagreeable malcontents, but can have a legitimate cause for their complaint.

Our report this year includes data for the first time on the role of tobacco smoke as a source of air pollution. Experiments are cited in which measurements have been made of carbon monoxide in smoke-filled rooms. In these studies the level of carbon monoxide has been shown to equal and at times exceed the legal limits for maximum air pollution permitted for ambient air quality in several localities. Under certain conditions these levels can also exceed the occupational Threshold Limit Value for a normal work period presently in effect for the United States as a whole.

CARBON MONOXIDE

The carbon monoxide levels in these "smoked" rooms, which ranged from 20 to 80 parts per million, may be associated with adverse health effects as measured by impaired performance on certain psychomotor tests. Investigators have noted that exposure to CO levels of 50 ppm and up, for example, has resulted in altered auditory discrimination, visual acuity and the ability to distinguish relative brightness.

The average individual probably may not often be exposed to such high concentrations of smoke for long periods of time without relief; but the fact that such dangerous conditions can develop should sound a warning to us. We cannot overlook the fact that exposure to these concentrations of carbon monoxide may be especially hazardous for those who are suffering from heart disease or chronic bronchopulmonary disease. And we must certainly give serious thought to the question of how this may affect driving performance in a poorly ventilated car with several occupants smoking.

With this scientific backing, with the realization that we are speaking for persons until now who have been diffident about exerting their rights, it seems to me that we can begin taking a far stronger stand than we have taken before.

PUBLIC PLACES

Already, of course, something has been done. Many of the major airlines now provide separate

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seating for smokers and non-smokers. The Interstate Commerce Commission has made an initial determination that smokers must occupy seats separate from non-smokers; however, this is still open to appeal and bus companies may have difficulty enforcing it. At least one State has passed legislation that requires virtually all railroads, bus firms ,and air lines to provide separate seating for non-smoking passengers. Smoking is forbidden on the Staten Island Ferry. In yet another state legislation has been introduced to forbid smoking in restaurants.

I am proud of the leadership which has been taken by the Department of Health, Education, and Welfare by our Secretary, Mr. Elliot L. Richardson, in protecting the rights of the non-smoker. The following steps are being put into effect in the Department, steps which seem to me eminently reasonable and satisfactory to smoker and non-smoker alike.

First of all, our Department is now asking those in conference rooms and auditoriums not to smoke. Some of our auditoriums — and the Department of Health, Education, and Welfare is a wide-spread organization, with hundreds of different locations — are already off limits to smoking because of local fire regulations; henceforth, all of them will be. At many of the conferences and meetings held in our Department, visitors are traditionally asked not to smoke; this is true of conferences in my office and has been from the beginning. From now on, it will be true of all conference rooms in HEW.

The second step which our Department is taking is in its cafeterias and dining rooms. We are establishing no-smoking areas in these facilities — areas where those who do not wish to smoke may no longer be bothered by those who do smoke.

WORK AREAS

And finally, we are setting up procedures so that supervisors may establish separate work areas for smokers and non-smokers, when they are requested to do so and when this is possible without interfering with the efficiency of the office or work operation.

During the next month we will be watching very carefully how these rules work out. For myself, I see no serious problem. The person who wants to smoke may continue to do so; those who are bothered by other people's smoke will have less smoke to bother them. We could, as I have tried

to make plain this evening, justify these new procedures on the basis of protecting the health of our employees and those who visit our facilities; just as easily, and perhaps more simply, we can justify them on the simple basis of asking human consideration and thoughtfulness.

It is my hope that the experience of our Department may serve as an example to other branches and levels of government and to private industry. In this, as in all our efforts, we ask your help: you who are the people who are most concerned with the problem of cigarette smoking, you who are members of the health professions, who are teachers, parents, concerned citizens.

DANGERS EXPLAINED TO PRESS

It was my assignment earlier this week to introduce our 1972 Report to the Washington press and television. I would like to conclude my remarks to you this evening by reading to you what I told the press at that time:

"Research on smoking and health over the past year has confirmed and strengthened previous findings regarding the significance of cigarette smoking as one of the nation's most serious public health problems. The number of deaths in the United States clearly related to cigarette smoking is far in excess of those caused by epidemics of poliomyelitis, cholera, typhus, or similar infectious diseases. But the measures previously taken to combat cigarette smoking by citizens and government alike fall far short of the measures taken by society to protect itself against communicable diseases. Of course, the difference is that cigarette smoking is largely a personal thing whereby the cigarette smoker harms only himself (if one assumes the non-smoker does not have equal rights).

"Our society has been most successful in combatting public health problems when the citizen has been passive. That is, we have purified our water supplies; prevented sewage from entering our drinking water; pasteurized milk; made certain that meat products did not transmit trichinosis, brucellosis, and tuberculosis; immunized our citizens after researchers developed vaccines against smallpox, polio, measles, and the like. But we have not been successful when the citizen had to take an active and responsible role: when he must exercise, when he must choose foods to avoid obesity and arteriosclerosis, when he must restrict his alcohol intake, and when he must restrict or elim-

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Editorials

YOU'VE COME A LONG WAY BARY

Many physicians have observed the apparent relative difficulty experienced by women in breaking the cigarette habit. A research project begun in 1966 by the United States Public Health Service and conducted in San Diego and Syracuse, New York tends to support this observation. The physicians and psychologists engaged in the five-year study noted as "a consistent phenomenon" women's resistance to giving up cigarettes, and a relapse rate of 38 per cent higher among those who do — one in nine for women as against one in 12 for men.

Over the past 15 years, beginning with a sharp surge after the Korean War, cigarette smoking by women has doubled, while among men it has steadily declined.

The reasons for this difference are not clear. The Public Health Service workers are having their least success in their educational program among women, the lower socio-economic groups, and the minorities. Advertising has had a massive success in making smoking socially acceptable among women, but it is believed that there are deeper psychological reasons for their comparative inability to give up cigarettes. It is possible that women tend, far more than men, to rely on cigarettes as a means of controlling anger and

frustration. Many women are unaware that cigarettes expose them to the same risks as men and are shocked to learn that the increase in cancer among women smokers has exceeded the increase among men smokers since 1960.

Some of the data indicate that women to a far greater extent than men rely on cigarettes for "image identification," much as do adolescents who take up smoking to signify their becoming adults.

The appeal of the cigarette industry to women ("You've come a long way, baby!") and to adolescents is one of the great crimes of modern society. A recent study shows objective evidence of functional changes in the lungs of teenagers who smoke. Studies among 365 students from four high schools in the New Haven area who had smoked one to five years exhibited excessive cough, sputum production, and shortness of breath. When maximum expiratory flow was plotted against expired volume, smokers had lower flow rates at mid-vital capacity and at lower lung volumes. Anesthesiologists are well acquainted with the hazards of respiratory complications in smokers as compared to non-smokers.

You've come a long way, baby — towards disaster.

A NEW ACOUSTIC MICROSCOPE EMPLOYING ULTRASOUND AND LASER LIGHT SCANNER

A new type of microscope using high-frequency sound waves rather than light to examine biological specimens has recently been developed. The new microscope now in the experimental stages may have important applications in cellular pathology.

While the new concept of an acoustic microscope is apparently not new, a working instrument did not become possible util acoustic holography techniques using a new acousto-optic laser deflector was developed.

After immersion of the specimen in water, a high-frequency sound wave is sent through it. This wave, now carrying spatial information about the specimen, strikes a plastic mirror mounted at 45 degrees to the direction of the sound, and causes

a minute ripple pattern on the mirrored surface. This ripple pattern is actually a dynamic acoustic hologram.

At the same time, a focused laser beam scans a selected area of the mirror by means of two acousto-optic laser deflector cells. The ripples on the mirror surface cause periodic angular deflections of the laser beam. Picked up by a photodiode, the periodically deflected laser beam is converted to an electrical signal which produces an acoustic hologram or a magnified picture of the sound field on a television monitor.

What is believed to be the first acoustic microscope photograph of actual biological cell structure ever taken was made with this instrument. The

(Continued on Next Page)

picture shows the individual cells of an onion skin magnified 400 times.

The sound frequency employed in the experimental model is 100 million Hertz, more than 5000 times higher than the highest audible sound. At this frequency, the smallest detail visible in the sound picture measures approximately one-thousandth of an inch. In later versions, it is claimed this resolution will be improved by operating at frequencies ten to fifty times greater. At that point, the resolving power will approach that of an optical microscope.

The resolution of the acoustic microscope, however, is not its most important feature. The mechanical wave motion of sound in contrast to the electromagnetic nature of light, permits an acoustic microscope to show features of a specimen which may go undetected by an optical microscope. The advantages of this property in the study of cellular tissues will be investigated. An additional potential advantage of the acoustic microscope in the biological sciences is the possibility of studying live specimens, while with the optical microscope specimens are usually fixed and stained.

An earlier prototype of the acousto-optic laser deflector was used in 1966 as the basic component of the first electronically scanned laser television system, and later in 1970 as a part of the more advanced tri-color laser television system.

The acoustic microscope is not a replacement for either the optical or electron microscopes, but rather a new third-type of microscope with its own unique capabilities.

REFERENCE

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BRONZE CANCER





Bronze cancer is threatening the very life of the four horses standing over the main entrance of the San Marco basilica in Venice. They were taken by the Venetians in 1204 from the Constantinople imperial hippodrome. They are covered with scales and keratotic patches suggestive of the Gallic disease (they were brought to France by Napoleon in 1797 and returned in 1815), or psoriasis, or a cutaneous manifestation of a visceral disorder. The changes are apparently due to bronze turning into

copper oxide. Air pollution, naturally, takes most of the blame.

There is a remedy, but only available in a specialized clinic in Rome. Horrified Venetians heard of the proposition to amputate a leg and send it to Rome for the experiment. A third proposition is to place the horses in a museum in Venice. Although officially united, Italy is really disunited. Venetians are afraid, once the horses are in Rome, that they will never return.

Francesco Ronchese, M.D.

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Your secretary just ran out

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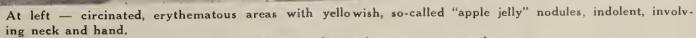
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At right — an erythematous, peeling, area on the neck on a sun exposed area.

Answer on Page 138



President's Message

Unity and cohesion of the medical profession in Rhode Island is a pressing need. We cannot individually face the multiple challenges from government and from an interested, alert public without an effective organization which represents all — one that can speak intelligently, clearly, and authoritatively on matters basic to our professional lives and the health of our society. We are in the midst of diverse popular movements which are motivated from high ideals, and whose intentions are not questioned; but it is an historical fact that newness alone does not guarantee the value, or the success, of a new proposal. In weighing the merits of new ideas and programs there is no substitute for professional knowledge and experience. To speak authoritatively we need special knowledge in all aspects of medicine which only a broad based membership can pro-

Organized medicine has a proud and honorable record. We have just celebrated the 450th anniversary of the founding of the Royal College of Physicians which was conceived, chartered, and constructed to insure a professional organization capable of establishing the highest quality in medical care, and the maintenance of the highest pro-

fessional standards by the mechanism of peer review. Our own medical society, now over 160 years of age, from its first meetings and actions has been true to the ideals of organized medicine. It has brought this tradition to its final state by the formal mechanism of peer review, begun under the presidency of Doctor Stanley D. Simon and given its final organizational form by the immediate past president, Doctor William MacDonald.

There is absolute justification for the concerns of the R. I. Medical Society, not only on moral grounds, but legitimized through law. We are exercising our rights when we insist that the practice of medicine, including the most effective delivery of health care, be on the highest scientific social and ethical basis. Again, to do this we need strength; our strength lies in numbers and diversity of interest. The R. I. Medical Society must include all elements of the profession in order that the concerns of the least can be the concern of all. Only by the participation of each and every man practicing medicine in Rhode Island can we effectively help each other. We must accommodate to one another with equity, justice and good will, regardless of our specialty interest, or mode of practice, whether solo or in a group, whether primarily a practitioner or exclusively a professor. We invite and solicit the membership of physicians in the state of Rhode Island; this equally applies to our physicians in training. The bylaws of the component societies, the state society, and the American Medical Association now make it possible for these physicians to contribute to our Society, and from it to receive our support.

There are some issues which call for a degree of resolution within the next year. These urgently need the counsel, advice, and support of a knowledgeable broad-based medical society. In National Health Insurance the record of counsel given by organized medicine continues to be good. This has been constructive; we above all others know where the problems lie. We should support those provisions in any national health program which will ensure care where it is not adequately met at the present time. Insurance for catastrophic illness and insurance for the fantastic advances in the technology of medicine must be financed for all, regardless of the ability to pay. Programs of national health insurance in other countries should be looked at objectively; those features which have resulted in the common good should be supported, but those features which have resulted or are likely to result adversely on a progressive, healthy profession of medicine should be opposed. Above all, the logical reasonable explanation for our position must be widely disseminated, and support sought at the very grass roots of public opinion by effective public relations.

Another opportunity for progress and influence for the common good is the institution of the degree granting program at Brown University. There are few arguments against the principle of expanded education; the possibility of increasing the number of physicians in Rhode Island is welcomed. The influence on the practice of medicine from the presence of a medical school is well known. But there are many legitimate arguments and concerns on the tactical level with respect to financing, with respect to the effect on bed availability, and with the prerogatives of physicians already established. These are legitimate concerns; they are the concerns of the Rhode Island Medical Society. An effective mechanism of liaison between the faculty of Brown University and the Medical Society already established under the presidency of Doctor Richard Sexton must be continued and made effective. It can serve as a forum for the resolution of these problems so that we all may reap the benefits, with fairness to all.

Group practice in many varieties is already an established fact. The R. I. Medical Society has the concern and welfare of the physicians practicing under such arrangements. In our structural reorganization we must include a clear channel for the reception of problems, and an equally clear, effective mechanism for giving support. In a pluralistic approach to the delivery of health care our House of Delegates should be a wide open forum.

Continuing education, relicensure and recertification are matters which will arise, and on which positions must be taken. These will be resolved to everyone's satisfaction only by clear discussion, and then a firm stand by the Society on the basis of knowledge, experience, and expected results. In a broader sense, the Society will be called upon to take stands with respect to the licensing and certification of those engaged in ancillary medical care. We must speak as one voice to make our position known on the state and national levels, when logic has prevailed.

The bylaws and the structure of our organization will be streamlined in the next year. Where traditional committees have outlived their usefulness they will be eliminated; where new committees are urgently needed for new problems, they will be created and staffed by knowledgable spokesmen from our number. The House of Delegates hopefully will be restructured to include specialty representation from all categories, as well as traditional county representation.

We have a great opportunity to utilize the financial resources of the Tri-State Regional Medical Program, SEARCH, and other federal grants in financing our own programs to better understand the medical needs of our state. In some instances finances may be available for us to embark on innovative programs such as a Medical Foundation. A study plan has been authorized by the House of Delegates, and the committee is proceeding with its work. A program of this nature will be launched only after the fullest exploration, and a favorable consensus given by our members. To do what we must in the coming vear and to continue a leadership role in the affairs of medicine in the state we need the help and the services of every physician in the state of Rhode Island; encourage those who are not members to join; and serve your society when called. A healthy professional organization and a healthy state are worthy of our efforts.

ROBERT V. LEWIS, M.D.

OFFICERS, 1972-1973, THE RHODE ISLAND MEDICAL SOCIETY



John A. Dillon, M.D.
of Providence
Vice President



Stephen J. Hoye, m.d. of Pawtucket
Secretary



SEEBERT J. GOLDOWSKY, M.D.
of Providence
Editor-in-Chief
R.I. MEDICAL JOURNAL
Alternate Delegate to the A.M.A.



Edmund T. Hackman, M.D.
of Warwick

President-Elect and
Delegate to the A.M.A.



John P. Grady, M.D.
of Providence
Treasurer



John E. Farrell, Sc.D.

Executive Secretary

General Meeting Of The Rhode Island Medical Society

New Officers Installed As Society Conducts 161st Annual Session

A general meeting of the Rhode Island Medical Society was held on Wednesday, March 15, 1972 during the 161st Annual Scientific Assembly at the Providence Biltmore Hotel. The meeting was called to order by the President Dr. William J. MacDonald at 3 p.m. There were no resolutions or proposals presented from the floor.

The secretary, Dr. Stephen J. Hoye, reported that the House of Delegates in meeting on March 8, 1972 had elected officers and standing committees to serve until the next annual meeting of the society. He read the names of the officers elected, and Doctor MacDonald introduced the new president, Dr. Robert V. Lewis of Providence who briefly expressed his appreciation for the honor bestowed upon him and he asked for the continued cooperation of the membership. The meeting was adjourned at 3:15 p.m.

Doctor Lewis, a Providence internist, was installed as the 113th President of the Rhode Island Medical Society. Doctor Lewis succeeded Dr. William J. MacDonald, a Providence obstetrician and gynecologist. Named as President-elect was Dr. Edmund T. Hackman, a Warwick general practitioner. Dr. Stephen J. Hoye, a Pawtucket surgeon, was re-elected Secretary, and Dr. John P. Grady, a Cranston pediatriciian, was renamed Treasurer.

A member of the Board of Directors of the Rhode Island Blue Shield, and a member of the Medical Economics Council of Rhode Island, Doctor Lewis served as Chairman of the Publications Committee of the Rhode Island Medical Society from 1965 to 1971. The body oversees the publication of the *Rhode Island Medical Journal*. Doctor Lewis has also served as a member of the Executive Committee of the Providence Medical Association and as a delegate from that organization to the House of Delegates of the State Medical Society. The new President served ten years in the House of Delegates and he has been a

member of the Society's Liaison Committee with Brown University.

An immediate past president of the Rhode Island Society of Internal Medicine, Doctor Lewis, a Pawtucket native, is a 1939 graduate of Brown University and he was awarded his doctorate in medicine from the University of Pennsylvania. He did postgraduate work at Rhode Island Hospital and at Brown University as a Haffenreffer Research Fellow in Internal Medicine.

A Fellow of the American College of Physicians, Doctor Lewis is a Diplomate of the American Board of Internal Medicine and of the American Board of Nutrition.

Doctor Lewis is a senior physician at Rhode Island Hospital and consulting physician at Butler Health Center, Providence Lying-In Hospital, and Notre Dame Hospital.

The new President holds memberships in the following professional organizations: American Medical Association, World Medical Association, American Association for the Advancement of Science, New York Academy of Science, Providence Medical History Club, American Association for the History of Medicine, American Heart Association and the American Diabetes Association.

A prolific writer in medical and lay publications. Doctor Lewis is a member of the Rhode Island Zoological Society, Philadelphia Zoological Society. University of Pennsylvania Museum, Society for the Investigation of Recurrent Events, and he is an Associate of the John Carter Brown Library.

Dr. John A. Dillon, a Providence internist, is a member of the House of Delegates of the State Medical Society and Chairman of the Publications Committee. A graduate of Holy Cross College, the new Vice President was awarded his doctorate (Continued From Page 110)

from Yale University Medical School. Doctor Dillon completed postgraduate training at Rhode Is-

land Hospital and at the Peter Bent Brigham Hospital, Boston.

A Diplomate of the American Board of Internal Medicine, Doctor Dillon served five successive terms as Treasurer of the Rhode Island Medical Society. He is also a past Chairman of the Society's Committee on Highway Safety and he has served for 12 years on the Scientific Work and Annual Meeting Committee. Doctor Dillon is on the active staff of Rhode Island Hospital as a physician in the Department of Medicine.

Dr. Edmund T. Hackman, the Society's current delegate to the American Medical Association, is a former President of the Kent County District Medical Society. The new President-Elect is also a past President of the Rhode Island Chapter of Family Physicians and he is a Fellow of the Industrial Medical Association. He is Vice President of the New England Chapter of that organization.

A former Health Superintendent of the City of Warwick from 1946 to 1960, Doctor Hackman was educated at the University of Rhode Island where he was awarded a Bachelor of Science degree. He was awarded a doctorate in medicine from the Jefferson Medical School. His postgraduate training includes an internship at Rhode Is-

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land Hospital. Doctor Hackman is on the staff of Kent County Memorial Hospital of which he is a charter member. He is a member of the Board of Mental Hygiene of the City of Warwick.

A member of the House of Delegates of the Rhode Island Medical Society and former member of the Executive Committee of the Providence Medical Association. Doctor Grady received his early education in Pittsfield, Massachusetts. He was awarded a Bachelor of Science degree from Providence College and he was awarded his Doctor of Medicine degree from Georgetown University. He served internships at St. Francis Hospital in Hartford and then at St. Joseph's Hospital in Providence. Doctor Grady's residencies were served at Chapin Hospital and at Boston City Hospital.

The Cranston pediatrician is a member of the active staffs at Rhode Island Hospital and Providence Lying-In Hospital, and consulting staff at St. Joseph's and the courtesy staff at Roger Williams General Hospital.

A member of the New England Pediatrics Society, the Society's Treasurer has served as President of St. Joseph's Hospital medical staff and Charles V. Chapin medical staff. He is past Chief of Pediatrics at Our Lady of Fatima Hospital.

Dr. Stephen J. Hoye, Chief of Surgery at Pawtucket Memorial Hospital, was re-elected Secretary of the Medical Society for a sixth term. Doctor Hoye, a native of Michigan, was graduated from Dartmouth College and Harvard Medical School. He interned and served a residency at Peter Bent Brigham Hospital in Boston and later served as assistant Chief of Surgery at West Roxbury Veterans Hospital. In 1959, he moved to Pawtucket and he established an office for the practice of general surgery.

Renamed chairman of the major standing committees elected by the House of Delegates: Dr. Thomas J. Dolan, Committee on Occupational Health; Dr. Kenneth Liffmann, Committee on Medical Economics; Dr. John A. Dillon, Committee on Publications; and Dr. Robert P. Davis, Committee on Scientific Work and Annual Meeting.

Newly elected chairmen are: Dr. Thomas Perry, Jr., Library Committee and F. Bruno Agnelli, Committee on Public Laws.

Dr. John C. Ham was elected Speaker of the House of Delegates, and Thomas F. Head was elected Vice-Speaker.

RHODE ISLAND MEDICAL JOURNAL.

Officers And Elected Committees, 1972-1973

Elected By The House of Delegates, March 8, 1972

Officers

President: Robert V. Lewis, M.D. Vice-President: John A. Dillon, M.D.

President-Elect: Edmund T. Hackman, M.D.

Secretary: Stephen J. Hoye, M.D. Treasurer: John P. Grady, M.D.

Standing Committee

John J. Cunningham, M.D. (Pawt.)

(President and Secretary are members, ex officio Stanley D. Davies, M.D. (Kent)

Occupational Health

Thomas J. Dolan, M.D. (Chairman

Philip J. Lappin, M.D. (Pawt.)

John E. Murphy, M.D. (Kent)

Dugald H. Munro, M.D.

Byron R. Quinn, M.D. (Pawt.)

Mendell Robinson, M.D.

Robert P. Sarni, M.D.

Howard Sturim, M.D.

Joseph E. Wittig, M.D. (Kent)

Library

Thomas Perry, Jr., M.D. (Chairman)

George V. Coleman, M.D.

Charles Dotterer, M.D. (Newport)

Mary Lekas, M.D.

Vincent MacAndrew, M.D.

Jav M. Orson, M.D.

Francesco Ronchese, M.D.

Guy A. Settipane, M.D.

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Medical Economics

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Andrew S. Blazar, M.D.

Martin E. Felder, M.D.

Edward Gauthier, M.D.

Ralph F. Pike, M.D.

Albert F. Rocco, M.D. (Woon.)

Henry S. Urbaniak, M.D.

Louis Sorrentino, M.D.

Public Laws

F. Bruno Agnelli, M.D. (Chairman) (Wash.)

Andrew S. Blazar, M.D.

Publications

John A. Dillon, M.D. (Chairman)

Stanley M. Aronson, M.D.

Bertram H. Buxton, Jr., M.D.

Herbert Fanger, M.D.

Carl F. DeLuca, M.D.

Thomas F. Head, M.D.

William A. Reid, M.D.

Richard Perry, M.D.

John F. W. Gilman, M.D.

Charles Hall, M.D. (Newport)

Peter L. Mathieu, Jr., M.D.

Jav Orson, M.D.

Guy A. Settipane, M.D.

Scientific Work and Annual Meeting

Robert P. Davis, M.D. (Chairman)

Frank G. DeLuca, M.D.

Russell P. Hager, M.D. (Kent)

Milton W. Hamolsky, M.D.

Henry T. Randall, M.D.

Robert W. Riemer, M.D.

Mendell Robinson, M.D.

A. A. Savastano, M.D.

Ben Feather, M.D.

Public Policy and Relations

Robert V. Lewis, M.D. President

Edmund T. Hackman, M.D., President-Elect

Stephen J. Hoye, M.D., Secretary

Richard P. Sexton, M.D.

William J. MacDonald, M.D.

John C. Ham, M.D., Speaker

Thomas F. Head, M.D., Vice-Speaker

PRESIDENTIAL ADDRESS

(Continued From Page 118)

sentation of our local specialty societies would greatly enhance the effectiveness of our Rhode Island Medical Society as a spokesman for all physicians. I should also like to recommend to the district societies and to the State Medical Society that the terms of office for the councillors and the delegates to he House of Delegates of the Rhode Island Medical Society, and of the delegates to the American Medical Association, be limited. Many other states have set such limitations in an effort to provide an opportunity for the emergence of new ideas and new enthusiasm among its members.

STATUS OF EARLIER RECOMMENDATIONS

Four years ago, at the end of my term as President of the Providence Medical Association, I made three recommendations to the medical community. One was that osteopathic physicians who have unlimited licenses to practice medicine be considered for membership on the staffs of the hospitals in Rhode Island. I am pleased to report that several of our hospitals now have osteopaths on their staffs. The American Medical Association and several of the specialty boards have approved

the acceptance of osteopathic physicians for internship and residency training. At the present time negotiations are under way to determine the feasibility of providing such specialty training in a non-osteopathic hospital for interns of the Cranston General Hospital.

My second recommendation urged the consolidation of all obstetric facilities in the greater Providence area at the Providence Lying-In Hospital which has the best facilities for obstetric and new-born care, and which has a serious excess of beds. The Health Planning Control investigated such a consolidation and approved the plan, provided the Lying-In Hospital establish an affiliation with a general hospital. The Lying-In Hospital and the Rhode Island Hospital, after thorough study by the trustees, staffs, and administrations of both hospitals, have agreed to such an affiliation. The savings in hospital costs and the increased efficiency of care made possble by the centralization of specialized equipment, and programs such as the infant intensive care unit, have been proved in other communities where consolidation has been effected. The next move in bringing about this major improvement in the delivery of obstetric care is up to the Health Plan-(Continued on Page 137



Wherever you go, forget your telephone calls. We'll take them for you, day or night.

MEDICAL BUREAU of the Providence Medical Association

PRESIDENTIAL ADDRESS

(Continued From Page 136)

ning Council and to the governing boards of the Pawtucket Memorial Hospital, St. Joseph's Hospital, and the Cranston General Hospital.

My third recommendation four years ago was directed to the problem of patients who are admitted as emergency cases to hospitals in which their attending physicians do not have privileges and therefore are not permitted to take care of them. It is difficult for the public to understand why a physician who although eminently qualified may not treat his patients wherever they may be. I urge our hospital staffs and governing boards to consider establishing a new category of membership, emergency staff privileges, for all physicians who are fully qualified. In addition to insuring continuity of care for patients such opening up of hospital staffs could eventually lead to a decrease in the duplication of expensive facilities and equipment.

PLANNING FOR THE FUTURE

I am still idealistic enough to believe that the vast majority of people who are involved in the delivery of medical care, including physicians, are sincerely trying to provide the best medical care to the most people at the least cost. Rhode Island with its several methods of medical care delivery, including fee-for-service private practice, various prepayment group plans, neighborhood health centers, and hospital centered health plans, is a unique laboratory to test the merits of each system. SEARCH, Rhode Island Health Services Research, Inc., is actively engaged in evaluating our pluralistic health delivery system. It would be a great mistake if our Congress were to enact any national health insurance plan, whether it be sponsored by labor, by Senator Kennedy, by the AMA, or by the present administration, until the hundreds of pilot programs throughout the country have been fully evaluated.

In closing, I must say that I have enjoyed my busy year as President of the Rhode Island Medical Society. Having learned something about the problems of health care in Rhode Island, I am willing to serve the Society or the community in any way I can in the future.

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INFORMATION WANTED

I am compiling ease reports of allergic reactions to biting insects, i.e., mosquitoes, fleas, kissing bugs, bed bugs, gnats and flies—including horsefly, sandfly, deerfly. I am also interested in reactions to fire ants.

I would like physicians to supply me with ease reports of those patients who have had reactions to such insects. Include in your reports, the history of the type of reaction and complications if any; the immediate treatment; if desensitization were attempted, what were the results? Send to:

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II. THE PUBLIC'S RESPONSIBILITY: A BLL OF RIGHTS FOR THE NON-SMOKER

(Concluded From Page 126)

inate smoking of cigarettes. Our failures have been when we require an active role on the part of the citizen.

"What is the proper role for Government in a free society? Is it to protect citizens from harming themselves? If by January 10, 1972, we have determined Government's proper role, it is far from being successful in that cigarette smoking and disease from cigarette smoking continue in our society. On the positive side, 29 million Americans have stopped smoking. On the negative, 44 million Americans continue to smoke. In the final analysis, education and enlightened self-interest should result in a non-smoking society.

"While I am clearly dissatisfied with the success of our efforts to date, I do want to emphasize that without the concerted governmental and citizen campaigns which have been mounted over the past 7 years, we could have a Nation of probably 75 million smokers and many more deaths due to cigarette smoking each year.

"I hope that in this next year each citizen will review for himself the summary findings of what is no longer an honest disagreement among medical scientists about the hazards of cigarette smoking. There is no disagreement — cigarette smoking is deadly."



DERMAQUIZ ANSWER

Both necks show dermatoses common in the past, but rarely seen at present. At left is Lupus Vulgaris (tuberculosis of the skin). At right is Pellagra, showing the typical involvement of a sun exposed area, producing a necklace appearance, the collarette, or necklace of Casal (the Spaniard credited with the first description of Pellagra in 1737).

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Two Sentence Essay

Invariably, we tend to be unduly optimistic about costs. Perhaps we should not be so surprised when we make new services available that people use them or that doctors will order them.

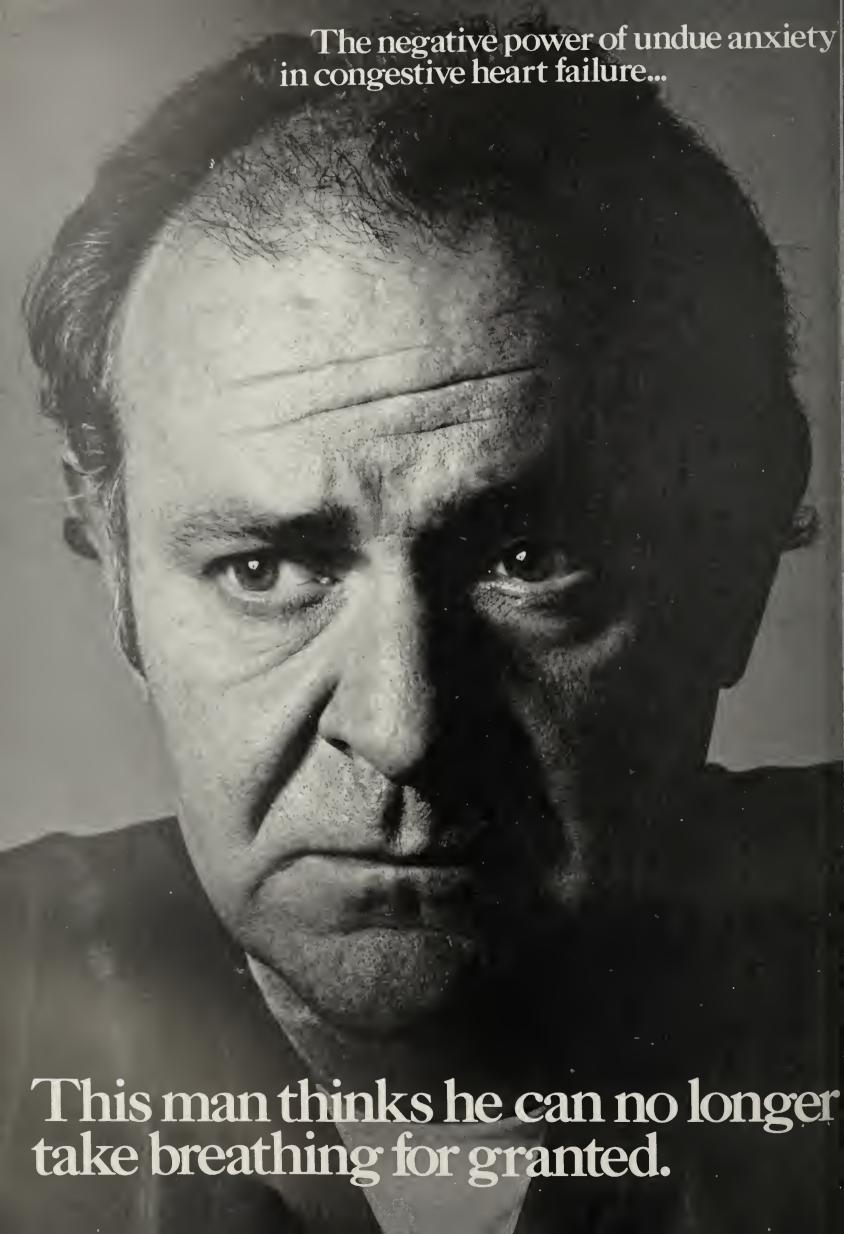
. . . Walter J. McNerney, President, Blue Cross Association.

JUN 1 2 1972

May 1972 Vol. 55, No. 5



Medicine In The Free World



Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation

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Concomitant use with primary agents
Libritabs is used concomitantly with certain
specific medications of other classes of
drugs, such as cardiac glycosides, diuretics,
antihypertensives, vasodilators and oral
anticoagulants, whenever excessive anxiety
or emotional tension adversely affects the
clinical condition or response to therapy.
Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects
on blood coagulation have been reported
very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

The positive power of Libritabs (chlordiazepoxide) 5-mg, 10-mg, 25-mg tablets

t.i.d./q.i.d.

up to 100 mg daily

for severe anxiety accompanying congestive heart failure

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

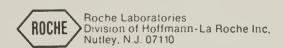
Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



Rhode Island Medical Journal

MAY, 1972

VOLUME 55, No. 5

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COVER: The Staff of Aesculapius, god of medicine. This is the official insignia of the American Medical Association and the accepted symbol of medicine—not the caduceus of Hermes (Mercury) who was the messenger of the gods, the patron of gamblers and rouges, and the escort of the dead to Hades. An excellent account of these matters may be found in THE ROD AND SERPENT OF ASKLEPIOS by J. S. Schouten, available in our Library.

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Book Reviews

AMERICAN MEDICINE AND THE PUBLIC INTEREST by Rosemary Stevens. New Haven and London, Yale University Press, 1971. \$18.50.

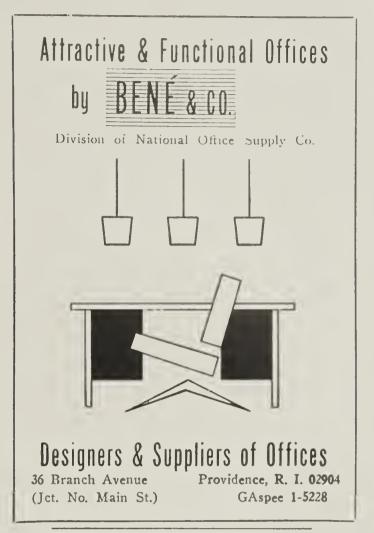
"Beauty is altogether in the eye of the beholder", the saying goes. So to a great extent is truth. Because of the slow-motion deadlines and the limitation of resources of this Journal, we are often scooped by the daily press. So it transpires that we must comment on this book after it has already been reviewed in The New York Times (Ed Cray, January 23, 1972) and THE PROVI-DENCE JOURNAL (Selig Greenberg, March 12, 1972). It is not surprising that both reviewers find the book a useful vehicle for expressing their own somewhat slanted views. Cray describes Miss Stevens' research as "cumulatively overwhelming", but concludes that she "lets the American Medical Association off the hook". Greenberg on the other hand, in his peculiarly pejorative style, trumpets that "Over the years the American Medical Association has arrogated to itself monopoly control over the standards of undergraduate medical education". He further states that "The profession's clinging to the hallowed concept of laissez faire has led to mounting inequities within the health care system, to soaring costs, and to a grave maldistribution of medical personnel . . . Increasingly, there has developed a conflict between the profession's narrow view and its own self interest and the public interest". While Greenberg quotes freely from the book, it should be emphasized that neither of these excerpts are from the book, but are rather samples of his own electric prose*

Rosemary Stevens, Associate Professor of Public Health at the Yale University School of Public Health, had published in 1966 an earlier volume titled Medical Practice in Modern England (Yale University Press), subtitled The Impact of Specialization and State Medicine. This carefully researched study was in a sense preparation for the present volume. She concluded that in the British system "The pressures of medical specialization (Continued on Page 160)

*After going to press, we came upon still another review of this book written by Doctor George W. Stephenson, Assistant Director of the American College of Surgeons, and appearing in the April 1972 issue of Surgery, Gynecology, and Obstetrics.

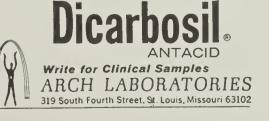
Stephenson takes a dim view of its credibility stating: "The author fails to convince me that she was able to understand the development of specialties in American Medicine or their influence on medical practice today."

Book Reviews





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Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative. In tubes of 15 g.

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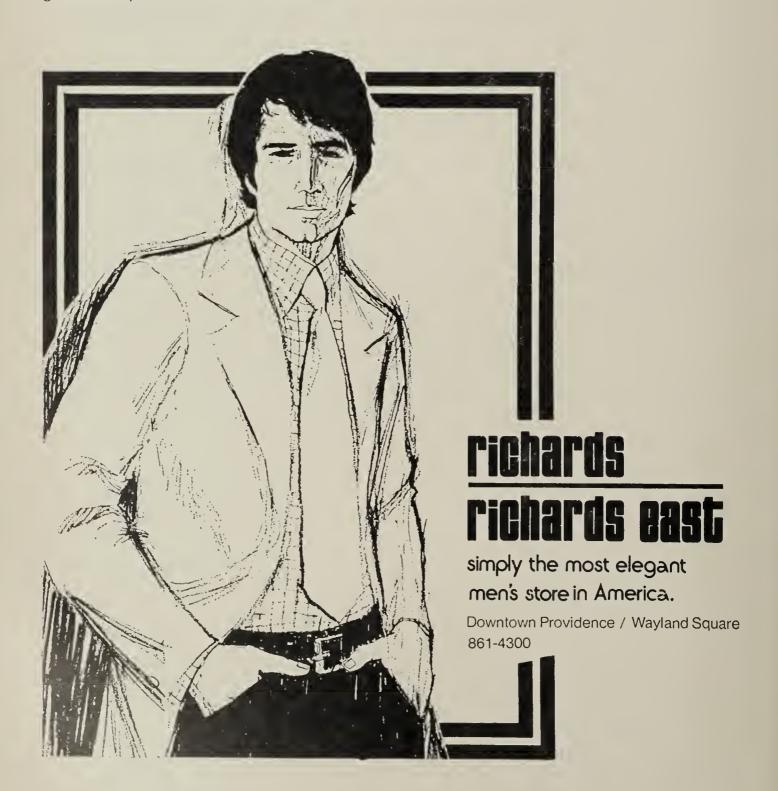
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-George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Results of a questionnaire to 7000 physicians:

82.8%

Physicians should play a role

78.3%

Independent scientists should play a role

69.8%

Medical academicians should play a role





Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968 - 1969)

Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Adminis-

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academicbased scientists could make it their business to comment on proposed regulations appearing in the

Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone un-heard. The FDA is caught among pressures from in-dustry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regu-

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combi-nations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practi-tioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of what the medical community and federal regulators do will often be represented in simplistic and somewhat misleading terms.

One illustration of the misuse of the media in this regard is the recall of anticoagulant drugs several years ago. This FDA action was given publicity by the press and television that went far beyond its probable importance. The result was a very uncomfortable situation for the practitioner who had patients taking these medications. Since the practitioner and pharmacist had not been informed of the action by the time it was publicized, in most states they were deluged with calls from

worried patients.

The practitioner can attempt to solve these problems of inadequate communication in several ways. One would be the creation of a communications line in state pharmacy societies. When drug regulation news is to be announced, the society could immediately distribute a message to every pharmacist in the state. The pharmacist, in turn, could notify the physicians in his local community so that he and the physician could be prepared to answer inquiries from patients. Another approach would be to use professional publications the practitioner receives.

All of this leads back to my opening contention: if drug regulation is to be effective, timely, and related to the realities of clinical practice, a better method of communication and feedback must be developed between the nongovernmental medical and scientific communities and the regulatory agency.



Maker of Medicine

Henry W. Gadsden, Chairman & Chief Executive Officer, Merck & Co., Inc.

In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a lawand regulation-making process that can have farreaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practicing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and represen-



tation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making proc-esses. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in proving precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to

make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis. and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted prima facie as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines

that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings-where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor? We would welcome your comments.



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Sighthill Clinic

Relatives Of Rhode Island Physician Practice Panel Medicine In Scotland In University Environment.

By Francis B. Sargent, M.D.

As a nation we are about to be offered various plans for socialized and semi-socialized medical care, more or less sugar coated to please the patient, the doctor, and the taxpayer. The following narrative will describe a system of patient care which may well develop after the taxpayer has become disenchanted with the various plans because of cost and has removed the sugar coating.

In the summer of 1971 I had the opportunity to reside for two weeks with my niece and nephew, who are general practitioners in the National Health Service of Great Britain. They work with a group situated at a Medical Center in Edinburgh known as Sighthill. At present 17 general practitioners have offices there. There are two groups, one of 11 members, and another of six, four men and two women, in which my niece and nephew work. The grouping is voluntary but popular because it relieves the doctor of the necessity of working 24 hours a day.

GROUP PRACTICE FACILITY

The Sighthill Center was designed and built by he Department of Health in Scotland. It provides consulting rooms for general practitioners in the

FRANCIS B. SARGENT, M.D., practicing physician in Otolaryngology, Providence, Rhode Island.

area of Sighthill, a suburb of Edinburgh. The doctors pay a moderate rental for space. They have nursing assistance, a laboratory, a physiotherapy facility, and a pharmacy. There are also child welfare services and a dentist, ophthalmologist, and chiropodist in attendance. Prescriptions are filled for 12 cents regardless of cost.

The center operates on an appointment system, each appointment being for five minutes with a five minute break every half hour to attend to correspondence. Casual patients are fitted in between appointments or at the end. The efficiency of the auxiliary and ancillary personnel was impressive. When a patient appeared at the control center, his records were produced and he was whisked to his doctor's office in a matter of seconds

General practitioners are paid by capitation, approximately \$7.50 (American money) per patient per year. My nephew has 2,000 patients on his panel. The capitation fee drops sharply if one has more than that number. In addition to the capitation fee he receives certain extras such as for pre- and post-natal care. The actual delivery is made by a midwife. Also there is an extra \$1.40 for each house call made between midnight and 8 a.m.

(Continued on next page)



(Top)
General view of Sightville, Scotland's first Health
Center, showing building which houses most of the
medical services.

(Center) Toddlers' playground.

(Bottom)

Auxiliary and ancillary personnel at afternoon tea.

A PICTURE OF PANEL PRACTICE

My nephew's answers to certain questions follow:

Availability at night. The Health Center is al-

ways manned. When the day staff leave, there is a night watchman from 8:30 p.m. to 8 a.m. who will take messages and contact the appropriate doctor.

Right of appeal. If a patient is dissatisfied with his general practitioner's (G.P.'s) opinion, he can request reference to a hospital consultant. The G.P. in most cases will be happy to arrange this. If the G.P. is in a "bad mood" he might tell the patient to go off his list and get another doctor. If this happens the patient is back to square one and starts, therefore, with whichever new doctor is willing to accept him.

If the patient is dissatisfied with the hospital diagnosis or treatment, he might ask his G.P. to refer him to another hospital, which of course the G.P. might not wish to follow. If so, the patient might ask his doctor to arrange a private consultation with a specialist.

There is no free access to consultants or diagnosticians in the National Health Service except through the General Practitioner. Exceptions are accidents or serious illness on the street where an ambulance can be summoned to take the patient to the hospital.

Hours worked per week. At present 80 hours is an average. This total includes time on call every night and on weekends when it is one's turn to do such duty. With an extra doctor, whom we have now started, the number of hours we work per week will be less except in times of epidemic.

House calls. These vary according to season: in quiet times an average of four new cases per day; in busy times 10 new calls per day; in epidemic times 25 per day. We do not make many return visits.

Minor surgery by the G.P. is not encouraged and carries no financial reward.

Supply of glasses. The patient gets a form from his doctor saying that he requires an eye test. This form is taken by the patient to a non-medical optician. Some specialist doctors do this eye testing too. If the optician finds anything amiss he will suggesst referral to a consultant.

One can always refer a patient directly to a hospital for eye testing, but this is an unusual course to take.

TEACHING OF GENERAL PRACTICE

During my visit, I was fortunate in being able to spend a morning with Professor Richard Scott. Professor of General Practice in Edinburgh University.

RHODE ISLAND MEDICAL JOURNAL



Richard Scott, M.D., James MacKenzie Professor of General Practice in Edinburgh University.

In dedicating himself to the upgrading of primary medical care he encountered two serious obstacles. The first was the obvious lack of interest in patient care evident in medical school faculties. This disinterest is being overcome.

The second obstacle is more difficult to handle, namely the reluctance of young men and women of medical school calibre to enter a lifetime career in a dead end street. He has pointed out to them that they are entering a career of noble public service and that the dead end street harbors none of the jealousies and animosities that they may have seen in hospitals. The medical schools are now facing up to the emergency. With one exception all schools in Scotland now have depart-

New luxury medical condominium office building in Providence, R. I. Units from 600 to 2,500 square feet available for sale or lease with option to buy. Thirty-five physician owners at present. No urologist, neurosurgeon, otolaryngologist, ophthalmologist or pediatrician presently in building. Sophisticated array of board-certified medical and dental specialists. First occupancy expected Summer 1972. Write P. O. Box 1437, Providence, R. I. 02903 for further information.

ments of general practice. New schools will be located in underprivileged areas, hopefully to recruit more general practitioners.

Doctor Scott's method of teaching the prospective G.P. is interesting. First, the medical school secures a panel of patients in a stable population area — 16,000 such patients in the case of Edinburgh. Stability is necessary so that the student can observe not only the patient's immediate illness but the strength and weakness of his family. The instructor sees the patient with the student present. The student may ask questions of the patient and discuss the case with his instructor when the patient has left. As the student progresses he is given patients to study in depth with the aid of the visiting nurse and social service worker.

It is hoped that this method will recruit more general practitioners by upgrading the specialty.

PRIVATE PRACTICE SURVIVES

When the National Health Act was passed the general practitioner suffered at the hands of a vindictive labour government. During the intervening years his lot has improved especially in the matter of compensation. Another fact worthy of note is the British custom in which the doctor owns the right to the medical services to his patient. This was also true in the days of private practice. Now, if a patient departs from the system and sees a consultant privately the consultant is not obligated to write a letter of apology.

Consultant means a specialist on salary in a hospital.

REFERENCE

Scott R: The university medical center and primary care. Johns Hopkins Med J 124:254-7, May 69
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124 Waterman Street
Providence, Rhode Island



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INDUSTRIAL AND WHOLESALE FUEL OILS

Primary Medical Care In Sweden

Can America Adopt Good Features Of Swedish System And Avoid Undesirable Ones?

By Joseph L. Andrews, Jr., M.D.

Swedish medical care either is praised in the United States for its efficient organization, modern facilities, and equal availability to all citzens regardless of cost or locale or it is criticized as impersonal and too expensive to the taxpayers. Supporters point to Sweden's infant mortality rate, the lowest in the world (the United States ranks 18th), and to its longevity rate, the second highest (the United States ranks 22nd). Critics, on the other hand, cite long waiting lists for physicians' appointments and hospital admissions, personnel shortages, and discontent which followed Sweden's health reforms of 1970.

How does medicine in Sweden really work on the level of day-to-day patient care? An answer to this question is crucial before any valid comparisons can be made between Swedish and American medicine and before we can decide: what features of the Swedish health system we should adopt and which we should avoid?

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I recently spent two months in Gothenburg (Göteborg), Sweden's second largest city. Since most reports have focused on the care provided by Sweden's huge, regionalized government hospitals, I was particularly curious about *primary* medical care. I spent considerable time with physicians and patients outside the hospitals to learn, at first hand, how both groups felt about Swedish medicine.

Medical planners have traditionally viewed hospital care as the most efficient way to utilize Sweden's small supply of physicians. However, the importance of *ambulatory* care has dramatically grown since ambulatory visits increase 250 percent from 7.4 to 18.7 million annually from 1952 to 1966 (Fig. 1). Visits exceed 20 million now. (Sweden has eight million people.)

Who sees the patient *first* when he is sick? Where is he seen? How effective is this primary care? How satisfied are patients and physicians?

Hospital care in Sweden is almost all under government auspices in regionalized, centralized hospitals (Figs. 2 and 3). Primary medical care is provided by both government physicians and a dwindling supply of private physicians. The government provides general practitioners called District Medical Officers (DMO's). It also runs the ambulance service and provides district nurses,

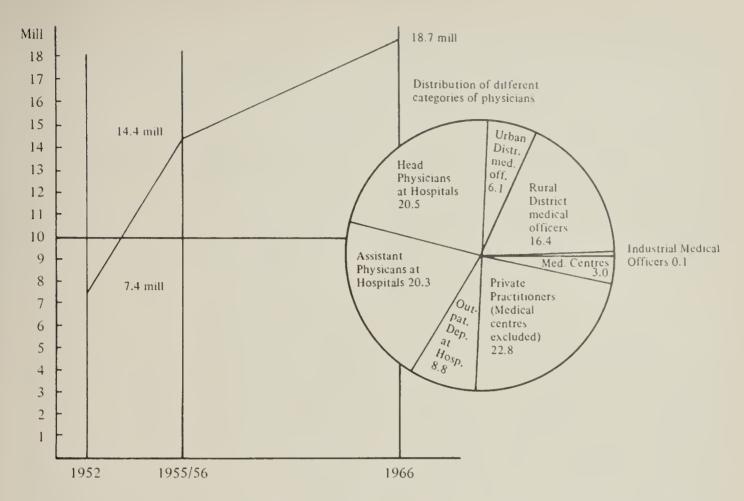


Fig. 1. Ambulatory care in Sweden, showing the increase (in millions) of patient visits per year from 1952 to 1966, and the proportion of total ambulatory care delivered by different Swedish health sectors in 1966. (From Wennstrom, G: Training of health workers in the Swedish medical care system. Ann. N.Y. Acad. Sci. 166:987, 1969.)

district midwives, maternity centers and child welfare centers (often attached to hospitals), a school health service, tuberculosis centers, and a public dental service (although private dental practice still flourishes). *Private* doctors practice in offices but rarely have access to hospital practices; they practice either alone or in multispeciality Doctors' Groups (*Lakarhuset*). Private physicians also staff the night Emergency Service (*Larmtjanst*). Other areas of private medicine are in industry and centers devoted to preventive medicine.

DISTRICT MEDICAL OFFICER (DMO)

There are about 800 DMO's in Sweden, and they account for more than 23 percent of all outpatient visits. In the sparsely populated rural areas where the DMO is the only physician available, he often is responsible for maternity and child welfare, school health, nursing homes, and public health work as well as caring for the sick. Although the national goal is one DMO per 4,000 people, DMO's in the country serve a population of about 6,000 people.

In cities such as Göteborg, a DMO's district encompasses 10,000 to 25,000 people. In Göteborg 24 district are served by medical officers.

I visited Dr. Lennart Appelgren, the DMO for Vastra Frolunda an ultra-modern, planned "satellite town" built in 1961 whose inhabitants are mostly young families and retired people. His district consists of blocks of identical three-story and four-story apartment buildings. The medical officer's office is located on the first floor of one of these large apartment buildings. It is spacious with a large waiting room, three examining rooms, the doctor's office, and another office for the sec retary and nurse.

Dr. Appelgren, a recent medical graduate substituting for the general practitioner who is the regular DMO, had almost six months training at Vastra Frolunda as part of a postgraduate practice requirement.

Dr. Appelgren describes his day: From 8:00 a.m. to 1:00 p.m. he seese 25 to 35 patients from his district; from 1:00 p.m. to 5:00 p.m. he holds private office hours in the same office, during (Continued on next page)

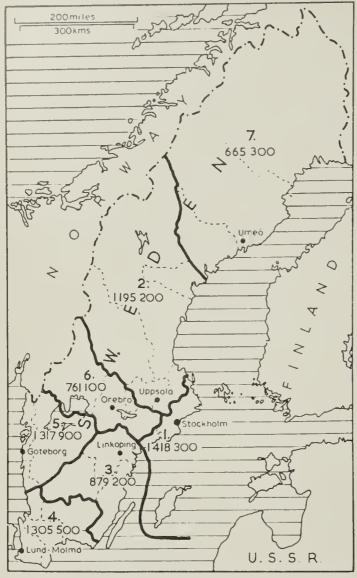


Fig. 2. Regionalization of Health Care in Sweden. There are seven regions of approximately one million people each with a large, specialized regional hospital near its center. (From Engel, A: Perspectives in Health Planning, London, Athlone Press, 1968, p. 78.)

which he sees 10 to 15 patients, some of whom choose to come to him from outside his district. Thus, he sees 35 to 50 patients a day or about 6 patients an hour. He works five days a week and is never on call at night.

The district patients pay a fee of seven crowns (\$1.40), and Social Insurance reimburses the Göteborg County Council, which operates the clinic, \$4.05 for each patient. So, the County Council collects \$5.45 with which it pays for the expenses of the DMO's office and pays his salary. The private patients' fees go directly to the doctor; 3/4 of the fee to a \$4 limit, or \$3 is reimbursed to the patient from Social Insurance, and they pay the rest. Thus, district doctors in Goteborg, who are allowed to supplement their salary with rivate practice fees, make excellent salaries compared to hospital physicians who receive salaries only. However, in most other parts of Sweden

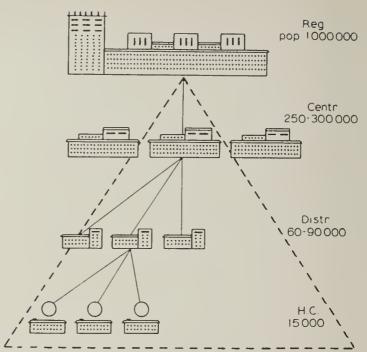


Fig. 3. Organization of Medical Care. Within each region is a very specialized regional hospital (Reg.), surrounded by outlying central hospitals (Centr.-, district hospitals (Distr.), and health centers (H.C.). (From Engel, A.: Perspectives in Health Planning. London, Athlone Press, 1968, p. 19.)

the DMO is on a straight salary as a government employee and is not permitted to see private patients. The Swedish government is trying to end completely private practice by DMO's.

The DMO's patients are not unlike those of his counterpart, the American general practitioner. Since his district has many young families, he sees many children. Mostly he treats minor illnesses, such as upper respiratory infections, back strains, and skin infections. He treats more than 90 percent of his patients himself without having to refer them to other physicians. He also issues Sickness Certificates (necessary for Sickness Benefits) and does some work evaluations for patients with chronic illnesses who apply for early government pensions.

Dr. Appelgren enjoys his opportunity to provide continuity of care based on understanding his patients' social backgrounds. These social factors are often missed by sporadic visits to the busy hospital outpatient clinics, where the patient sees a different physician at each visit. He gave as an example a 35-year-old Finnish woman with severe rheumatoid arthritis whose husband was disabled. She had difficulty finding an apartment. While visiting a social worker, she collapsed and was admitted to a hospital surgical ward. When she awoke, she was agitated. A psychiatric consultant prescribed tranquilizers. Not having the time to deal comprehensively with her many problems, the

hospital physicians ent her to the DMO. Dr. Appelgren's approach was a comprehensive one treat her arthritis, get medical help for her husband, and get a social worker to help the couple find an adequate apartment.

However, continuity in medical care is only partial, since, if the patient gets sick at night, he has to call another physician from the Emergency Service. If the patient needs a specialist's evaluation, he is referred either to the Central Polyclinic nearby or the the Sahlgrenska Hospital Outpatient Clinic, where he is admitted to the hospital if necessary. In neither case does the DMO have any further responsibility for the patient's care since the DMO does not have the right to treat patients in a hospital. Dr. Appelgren believes that communication between the hospitals and the DMO's is unsatisfactory since discharge summaries often take months to reach the DMO from the hospital, and coordination of the patient's medical care between the various specialty units of the hospital is poor. He believes this situation has grown worse since the Seven Crown Reform in 1970 because hospital physicians have less personal interest in the patients, and they send them back to the DMO's for treatments, like suture removal, that they formerly accomplished at the hospitals.

He also believes that, because he has only five to ten minutes per patient, he does not have enough time to spend talking to his patients. Also, many patients with minor illnesses, such as colds, seek the physician's care and occupy time that would be better spent with more seriously ill patients. He regrets also that no time exists for preventive measures, such as yearly checkups which are not covered by Social Insurance.

Dr. Applegren enjoys his first experience in general practice immensely because of his personal contacts with his patients. He believes all physicians should have general practice experience. Like most young physicians in Sweden. however, his eventual aim is for a career in hospital practice and research.

The big problem remains—how to attract young men to full-time careers in primary patient care. The hospital-based specialty training most young physicians now receive makes such a career as a primary physician seem unattractive, but the need exists, both in the country and in the city, for medical care where people live.



The Sahlgrenska Hospital Outpatient Building, Goteborg, Sweden.

SOLO PRIVATE PRACTICE

Of the approximately 10,000 physicians in Sweden in 1970, an estimated 1,350 or 14 percent are in private practice. But, of these, about 400 are over age 65 and work only part time.7 The total number of physicians in private practice decreases vearly as the older doctors retire and few young ones take their place. Of the 1,200 general practitioners in Sweden, 400 are in private practice (while 800 are government employed DMO's). Other private physicians are specialists, such as otolaryngologists and clinical cardiologists. Still making an important contribution, private physicians provide 26 percent of the care for ambulatory patients.1

However, since no private physicians have staff privileges at government hospitals, the practice of most private physicians is limited to their own offices. For this reason almost no surgeons are in private practice in Sweden since they would not have access to a hospital where they could operate.

The disadvantage of excluding private doctors from access to hospitals is two-fold, that is, to the patients and to the physicians. If a patient requires hospitalization, he will almost certainly be admitted to a government hospital where his private physician can no longer care for him. Thus, the advantage of a well-developed doctor-patient relationship — the patient's trust in his own physician and the physician's understanding of the patient's medical and social history — is lost, whereas this close relationship would have been helpful in diagnosis and therapy. For the physician, exclusion from hospital care means loss of medical proficiency from lack of access to advanced diagnostic facilities and absence of stimu-

(Continued on Page 162)

Along The Road To Vellore

Author Describes Sights And Sounds Along Indian Pathway

By Laurence A. Senseman, M.D.

The road from the Christian Medical College in South India to Vellore is only three miles long. It winds its way through rocky hills and amid a collection of adobe or brick buildings.

Three buses come each morning with medical students, many of them female. They are a quiet, orderly group, speak good English, and are cleanly dressed. The girls are in saris, the men in white, and each has a stethoscope about his neck.

The road is paved about the width of a bus, but with wide dirt shoulders. Everyone uses the macadam strip, including the bullocks, carts, bicycles, donkeys, and other oncoming scatter. A chicken darts back and forth not sure which way to go. A beeping taxi just misses us as it sweeps by. I could easily reach out the windowless bus and touch the driver in his cab.

LAURENCE A. SENSEMAN, M.D., formerly of Lincoln, Rhode Island, was associated for two years with the Christian Medical College in Vellore, South India. Doctor Senseman now resides in Glendale, California and is Psychiatrist to the Glendale Adventist Hospital.

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The little shops are filled with everything to eat, but our Western appetites are not aroused. The odor is of food cooking, but not easily recognized by us as we pass. The thatch-roofed red adobe homes are small and you can't see inside because they have few, if any, windows and usually some human or bullock is in the doorway. As we travel on, the bicycles seem to spread apart as if the drivers have eyes in the back of their heads. Here comes something that takes up the width of the road and then some — three donkeys abreast with huge bundles of laundry at each side. A barefooted boy gets partly off the road as we too hit the dirt shoulder with horn honking.

That white temple with the row of gaily colored, short, fat images about the roof is a Hindu temple recently completed. The little figures with many arms, elephant trunks, and grotesque features are their many gods. Only a small place, I'm told, just for prayers.

A beggar with no fingers and no toes appears. He pleads for coins as the bus stops. His leprosy has made him unfit for work. One per cent of the population here are infected with Hansen's baccilli. Another 5 per cent have tuberculosis. The fellow in the rickshaw is coughing noisily, is thin



Figure 1
The main offices, library, and conference room are housed in this building of Christian Medical College, Vellore, South India.

and emaciated, and is not too aware of his surroundings. Perhaps the black diesel fumes from our bus will kill off many of the TB germs he is spreading in the atmosphere.

It's hard to get used to seeing men and children using the roadside, in full view of everyone, to answer Nature's call. But there they are; you must learn not to look at them! The children below two or three years of age wear nothing except a string about their distended tummies. Over there a poor elderly woman is scooping the fresh oxen droppings with her bare hands and putting them into a receptacle on her head. Later she will make patties by drying them on the wall of her home. She has done this many times before for fuel.

The traffic policeman in khaki shorts and smart headgear waves us past as he holds a little sign in his other hand. He seems oblivious to the helterskelter of the noisy traffic about him as he passively waves us by.

Here comes a herd of goats. The shepherd boy behind, keeps them moving as they somehow escape being run over. They all look as though they had been eating the billboard signs. I saw one doing just that a short distance back!

Much of what people carry is placed on their heads or in their large-wheeled bullock carts or in their small wagons with very small listless horses. Here comes one with large bags of grain—a truckload with a one-half-horsepower engine whipped into motion. That young boy on a bicycle is pulling behind him a 12-foot ladder through all the heavy traffic. What a load! A horn blows out Indian music, tunes our ears can't seem to get accustomed to. We cannot comprehend the objectives of the endless choruses and chants.

A new shopping building is rising four stories high. Young women of the crew carry the materials on their heads, walking a few steps and then exchanging the materials with another woman. I counted nine changes of a small load of concrete before it reached its destination. Even up ladders they pass the load one to another, quietly and apparently with ease.

The scaffolding is of rather rough lumber or bamboo and is tied with bamboo material. It looks unsafe, but apparently even the biggest buildings can be constructed in this manner. The work is being done quietly and by human labor rather than by machine.

As we go farther into the city we come to the bazaar. Here, in small stalls right on the street, merchants are selling everything imaginable. Every person may have two or three items for sale, no more. The vegetable market is something to behold and to smell. It is not a very appetizing place to buy, but you can get anything and everything. The ever-present bullock, as well as the carts and the noise and odor overwhelm the visitor.

As we pass the market we round the corner into the busiest part of the city. Just to the left is an old fort, and in this fort is a large Hindu temple, the largest in the entire area and perhaps the best. Inside this gate of the fort, which is surrounded by a moat, you enter a large compound where there are a collection of old buildings and the police department. I have had to go to this police office on several occasions and meet those in charge about the visa that I have had so much difficulty in securing.

We soon enter the main gate of the hospital compound. As I look out the window of our bus, I see a leper with legs completely distorted and atrophied, sitting on the ground on a piece of matting and rubber tubing and pulling himself along with his hands, pleading for alms.

As we go into the busy hospital compound, made up of many buildings on a 32-acre plot, we find 100 beds with 362 doctors and 380-plus medical students. It all looks like chaos to the uninitiated, but apparently the swarms of people who are outpatients, inpatients, and relatives milling about in this huge complex of buildings, all know what they are doing. There are about 100 admissions a day, I noticed on the statistical board as we walk into the hospital. This would tax any admissions department, I am sure.

The outpatient department is a mass of people (Concluded on Page 171)

Editorials

MEDICAL CARE IN THE FREE WORLD

This issue of the Journal is devoted to papers describing medical care in various countries around the world. While we do not necessarily suscribe to any of the views expressed, we believe that these experiences will be of interest to our readers.

In the New York Times of April 23 and 30, 1972, Harry Schwartz explores related problems. In the first instance he discusses discontent with socialized medicine in Sweden, noting the following complaints: 1. The medical system is swamped; 2. The care is impersonal; and 3. The taxes are high. In the second are described the current problems of HIP in New York, which has filed for a 36 per cent increase in premiums. Many

of its subscribers complain of long waits, lack of continuity of care, and lack of privacy.

In England dissatisfaction with the National Health Services has resulted in the rapid growth of a private competitor, the British United Provident Association (BUPA), which some employees are actually receiving as a fringe benefit and which, incidentally, is affiliated with American Blue Shield.

We should like to call attention to book reviews published elsewhere in this issue (See page 141), both of which are addressed to the problems of medical care in the United States.

PROTEIN COMPONENTS OF LIPOPROTEINS

The complete amino acid sequence of the first of six known protein components of lipoproteins, the transport vehicles for most of the lipids in human blood, has been worked out by Brewer et al. of the National Heart and Lung Institute.

The three classes of lipids — cholesterol, trigly-cerides, and phospholipids — travel in the circulation in combination with protein, which confers solubility on fatty substances that would otherwise be insoluble in plasma. These fat-protein complexes, or lipoproteins, are produced mainly by the liver and gastrointestinal tract.

Lipoproteins are divided, perhaps arbitrarily, into three classes on the basis of density. The lightest are the very-low-density (VLDL or prebeta) lipoproteins, which contain only 2-15 per cent (by weight) of protein, the remainder being lipid. Low-density (LDL or beta) lipoproteins contain 20-25 per cent protein, and high density (HDL or alpha) lipoproteins contain 45-55 per cent protein.

Each lipoprotein transports a mixture of lipid, so that triglyceride, cholesterol, or phospholipid may travel in combination with lipoproteins of any weight class. However, as it works out, VLDL transports most of the triglycerides of plasma, LDL most of the cholesterol, and HDL most of the phospholipid.

High-density lipoproteins and the lipids that they carry do not appear to be atherogenio; in fact, a high HDL fraction may actually confer some protection against the development of atherosclerosis. However, excessive blood levels of VL-DL result in elevated blood triglycerides, and excessive blood levels of LDL result in elevated blood cholesterol, both of which are strongly associated with premature development of atherosclerosis and coronary heart disease. Recent studies have shown that blood-lipid abnormalities are closely related to lipoprotein abnormalities.

Attention is now directed increasingly to the protein content of lipoproteins as well as to the lipids they carry. Investigations have revealed that at least six separate proteins, called apoproteins, are components of the lipoproteins of human plasma. As is the case with lipid, each lipoprotein class may have several apoprotein constituents, some of them present in other lipoprotein classes.

The isolation and purification of the various apoproteins of human lipoproteins has constituted a step toward 1) identifying and classifying genetic factors operative in lipoprotein synthesis and in hereditary forms of hyperlipoproteinemia; 2) shedding new light on lipoprotein structure (still poorly understood) and the differing affinities of the various lipoproteins for the lipids of human plasma; 3) clarifying the specific mode of action of lipid-lowering diets and drugs; and 4) bringing to light other functions of apoproteins, other than conferring solubility on the lipids being transported, that may have great importance in lipid metabolism.

The determination of the amino-acid sequence of the first of these apoproteins, designated apoLP- alanine, which comprises some 30 per cent of the protein of very-low-density lipoproteins, is an important step toward these goals.

Brewer and co-workers employed a technique which permits the removal in sequence of individual amino-acid links from the chains of peptides and proteins, and hence the determination of their chain structures. The procedure was performed on intact apoLP-alanine and also on fragments of this protein molecule obtained by using the protein-digesting enzyme trypsin to break the peptide chain at various points. The individual amino-acid links were identified by gas, or thin layer, chromatography and by mass spectroscopy. The apoprotein analyzed consists of 79 amino acids. A short carbohydrate side chain is attached to the

peptide chain at the 74th amino acid link (threonine). A number of other lipoprotein apoproteins appear to have carbohydrate side chains. Their functions, if any, as determinants of apoprotein or lipoprotein function or as factors possibly affecting the antigenic behavior of lipoproteins are still not clear.

While apo-LP-alanine is the first apoprotein of human lipoproteins whose chemical structure has been precisely defined, the structures of the other five known apoproteins will probably soon be delineated. These important developments should lead to a better understanding of lipoprotein function and metabolism and of the role of the lipid-transport particles in the genesis of artherosclerosis.

RECHARGEABLE CARDIAC PACEMAKER

A newly developed nickel-cadmium battery used in conjunction with a rechargeable cardiac pacemaker devised by the John Hopkins University's Applied Physics Laboratory and related medical research groups has the potentiality of operating in the human body for up to 20 years without removal or repair.

An aerospace engineer and an engineering technician of the General Electric Company designed, developed, and built the nickel-cadmium batteries used to power the packmaker. The small nickel-cadmium batteries permitted design of a pacemaker one-third the size of conventional models. Commercially available models employing five or six fairly large mercury cells are comparatively large and heavy. The Hopkins pacemaker measures one-half inch in thickness and one cubic inch in volume, and weighs two ounces.

Present cardiac pacemakers have the disadvantage of requiring surgical removal about every two years because of depletion of the storage battery. The Hopkins-developed unit can be recharged through the skin in a simple procedure that takes about an hour each week. The patients wears a special vest in which an alternating current field generated by a small coil in the vest passes through the intact skin and is picked up in the implanted pacemaker, thus recharging the battery. No sensation is felt by the patient. These nickel-cadmium batteries have a potential lifetime in excess of 20 years.

The pacemaker provides its own monitor of battery voltage. Since the pulsing rate depends upon battery voltage, a variation in the patient's pulse rate indicates a change in the charge level, thus providing possible warning that the battery needs recharging. This new and promising advance is a bright example of the type of contributions which converted aerospace scientists and engineers hopefully will make in the medical field.

WARM LINE

In the Society's mailing of the April NEWSLETTER an explanation of WARM LINE, the Roche Laboratories taped discussions available to physicians on a free direct dial basis, the New Jersey telephone numbers were inadvertently omitted. Here they are for your assistance in securing opinions by competent clinicians on clinical management for drug abuse crises: .

 Dial Free

 AMPHETAMINES (Dr. David E. Smith)
 201-235-4585

 HALLUCINOGENS (Dr. William Abruzzi)
 201-235-4685

 OPIATES (Dr. Edward C. Senay)
 201-235-4885

 BARBITURATES (Dr. Thomas Payte)
 201-235-4785

NOTE: The opinions expressed are those of the physician speaking.

BOOK REVIEWS

(Continued from Page 141)

have become stronger than professional and social traditions. Specialization has posed many complex questions, and undoubtedly more will arise". The relevance of these conclusions to her later observations of the American scene are obvious, and portend her analysis of our current problems.

This volume is a substantial tome, heavily and meticulously researched. The approach and analysis are based on an historical perspective which objectively views the development of the present status of things and urbanely seeks no scapegoats. Many of our present difficulties, problems, and prejudices are based upon an ingrained populism and the democratic instinct in the American character.

Organized medicine had its beginnings in efforts at self-policing of ethics and quality of care, a process we would now call peer review. She aptly traces the origin of the present marked trend to specialization and scientific medicine to the Flexner report of 1910, which was motivated by an ambition radically to improve undergraduate medical education.

As specialization grew like Topsy, the need for setting standards for certification and training again was met by the profession through joint action of accepted specialty groups and the AMA.

In discussing the advent of involvement of the Federal government in the financing of medical care, Stevens points out that there has been up till now little opportunity for wide scale organizational experimentation. "The diffusion of energy and efforts," she states, "is the major feature of American medical care." One of our present difficulties, she believes, is a simplistic tendency to consider government regulation as the only likely alternative to laissez-faire.

She points out that "The current situation in medical care in the United States is often referred to as one of crisis". This in no sense can mean a state of "imminent collapse of health services", since we are "well-stocked with personnel and facilities and can afford to spend even more is providing them". There is, she feels, need for innovative ideas, and new solutions. Yet, "It is precisely here that the historical perspective is important". "There is a tendency in American social planning," she says, "to assume that the past does not exist, or is irrelevant. In health services there is a fashionable pursuit of new-

ness." In other words, don't throw out the baby with the bath water.

Again, she states: "Of more immediate importance are the organizational implications of the deep-seated and early development in the United States of a medical profession whose internal social relations are egalitarian. Elitism within the ranks of physicians has been rejected time and again in America".

She continues: "It is notable that, despite the political visibility of health issues in the 1970's, the actual ways in which health care might be provided are much more clearly defined by the medical profession than by any body of opinion in Congress. This is in part because organized medicine has a centralized political structure in the AMA, while the responsibility for health matters in the Congress is diffused among competing Congressional committees."

"It would be unrealistic," she states, "to assume a total sweep of traditions and institutions. A new health care system will not spring up overnight; it will, rather, arise out of, or in opposition to, existing institutions. The patterns peculiar to American medicine, developed over three centuries, are thus important in considering particular forms of development."

On the relative roles of government, the consumer, and the profession, she concludes: "The catalyst for further change will be through the political system . . . The actual leadership for change will, however, continue to rest largely on the medical profession . . . The strengths and abilities of the American medical profession have been remarked on throughout history. From its scattered beginnings, to its current concerns over health care financing, staffing and operations, the American medical profession has modified its structures and policies significantly over the years, if still too slowly for, the gigantic changes in the technology and the technological implications of medicine."

The author clearly delineates the historical background of the current fragmentation, a result of specialty proliferation and technological advances. She sees a need for integration through new mechanisms of organization and delivery. Yet she has no ideological bias against a pluralistic approach and expects with sympathetic understanding that the medical profession through its basic good will and based on its long history of performance in America to rise to the challenges. (Continued on Page 161)

BOOK REVIEWS

(Concluded from Page 160)

The following observations probably summarize as well as any her philosophy and hopes for the future. "Enormous efforts are being made to come up with innovative ideas and new solutions . . . Out of the long evolution of professionalism in medicine in the United States, and out of the concurrent definition of the public interest have emerged dominant attitudes and patterns which will [in the forseeable future] continue to influence health care development."

SEEBERT J. GOLDOWSKY, M.D.

* * *

ONE LIFE — ONE PHYSICIAN by Robert Mc-Cleery. Washington, D.C. Public Affairs Press, 1971. \$5.00.

The dust jacket describes this 167-page book as Ralph Nader's study group report on the medical profession's performance in self-regulation. The ambiguous title, in tone reminiscent of the Code of Hammurabi, promises controversy and sounds threatening. The physician-author, a lawyer, a law student and two medical students comprise the group that sets out "to discover what systems of quality control the profession has established to monitor each physician's service to his patients, to evaluate how well these systems perform, and to determine whether the profession merits the trust with which society has placed itself into the hands, and relied on the hearts, of all its physicians." The method of study has been to search the medical literature for evidence of the quality of medical care and review the roles of various regulating bodies: the state licensing boards, the medical societies, the Joint Commission on Accreditation of Hospitals, and hospital governing boards. The relevant literature is sparse, and that fact itself forms part of the indictment. Not surprisingly the group finds a dearth of reports on quality control, an enormous variability in performance, and insufficient surveillance of physicians. Historically these phenomena seem understandable, for during most of the millenia of medical history medical care was supportive, placebo the chief therapy, and quality of care scientifically irrelevant. In recent decades exponential increases in scientific medicine have provided the excitement of discovery that overshadowed more pedestrian problems of control. Doctor McCleery now thinks the time for increased regulation and surveillance of physicians has come. To this end he proposes limited licensing of physicians, license

renewal, obligatory formal continuing education, and written criteria for optimal medical care. He also recommends peer review, national uniformity of medical records and medical licensing, and the appointment by the President of a National Board of Medicine with sole jurisdiction over health care programs funded by government. State laws in conflict with such federal enactment would be required to conform. He admits such a program raises constitutional questions.

High quality of medical care is an accepted goal of physicians. The means to achieve that goal have remained controversial. Traditionallly medicine has employed careful selection of candidates for the M.D. degree as a major element of quality control, while increase in specialization of medical practice reflects the same concern fostered by physicians and patients alike. Doctor McCleery has listed changes he considers necessary, each of which merits careful analysis not here provided. But, for example, he requests limited licensure of physicians within a defined area of competence. This recommendation has unfortunate restrictive impact already evident to patients and planners who seek more general practitioners. National uniformity of medical records seems a goal with merits. However, the best model of such national uniformity of records is the federal tax return which seems to raise its own special can of worms. And a National Board of Medicine presents problems that resemble those of other government commissions which have had their attackers.

Doctor McCleery's trust in the medical profession is not marked in this study. Those excellencies of the past that have brought us to our present condition seem no longer dependable to him. However, two admissions by the author point up fatal flaws in his thesis. First, John B. Veneman, undersecretary of H.E.W., is quoted to have denounced certain proposed health legislation, "because it would break, utterly and totally, with the past." Inquires Doctor McCleery: "Is this necessarily undesirable?" Professor E. H. Carr of Cambridge effectively answered him, when he defined utopianism as meaning rejection of the past. Utopias are idealizations that reject the validity of history, are non-historical, and therefore unrealizable. Secondly, Doctor McCleery notes: "this suggested system may seem repressively structured, and it is." Utopianism in rigid form then seems an unpromising prescription for any institution however applied.

John F. W. Gilman, M.d.

PRIMARY MEDICAL CARE IN SWEDEN

(Continued from Page 155)

lation from colleagues, consultants, and teaching sessions that a modern hospital provides to "keep the physicians up to date." This exclusion from hospitals has dissuaded young Swedish physicians from entering private practice. Instead, they prefer to stay on the hospital staff, often remaining in a junior position for many years. In 1970 in Göteborg which has 196 private practitioners many of them past retirement age, not one young physician entered private practice.2

According to Dr. Nils Blume, a former President of the Göteborg Medical Society, young physicians are dissuaded from entering private practice both by the counterattractions of modern, hospital-based medicine and by Sweden's prevailing viewpoint that it is not right to earn money from ill patients, at least not in private practice.2 While the future of Swedish private practice is uncertain because of the government's stated goal of total socialization, he sees some signs of respite, namely, the rising costs of medical care and the increased output of new physicians during poor financial times, making the government unwilling to assume all the costs of Sweden's medical care. Also, the public still insists on an alternative to long waits and long lines at government hospitals.

PRIVATE GROUP PRACTICE

In order to attract more young physicians into nongovernmental medical practice, the Swedish Medical Society in 1963 started to construct "Doctors' Houses" (Lakarhuset) to provide office space and diagnostic facilities for new multispecialty group practices. About 260 physicians are now employed by the Swedish Doctors Service Corporation (Lakartjanst AB), which has organized group practices in four Swedish cities.7

In Göteborg 11 full-time specialists, such as internists, orthopedists, and dentists, and several part-time doctors are in practice. Some offices in the building are empty and enough work is available for many more doctors, but most young men are afraid to leave their government hospital positions to work for the Doctors' House for fear that this group practice will be socialized soon.

Doctors' Houses were established to provide modern facilities to treat outpatients outside of the hospital and to eliminate the need for hospitalization to obtain all the patient's care; this would help relieve the hospital from its crush of out-(Continued on Page 165)

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Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

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rhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of Insulin requirements due to dietary restriction and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of pati

ances have been reported in patients who concomtantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. Cardiovascular: tachycardia, palpitation, elevation of blood pressure. Gastrointestinal: nausea and vomiting, diarrhea, unpleasant taste, constipation. Endocrine: changes in libido, impotence. Autonomic: dryness of mouth, sweating, mydriasis. Allergic: urticaria. Genitourinary: diuresis and, rarely, difficulty in initiating micturition. Others: Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sale (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

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Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

patients. Thus, within the Doctors' House building are modern offices, a well-equipped laboratory, and a radiologist. The corporation supplies managerial personnel to handle the business side of the practice. Each doctor's net earnings, after expenses, are directly proportional to his income from patient fees and reimbursement from National Insurance. Incomes equal or exceed government salaries for doctors.

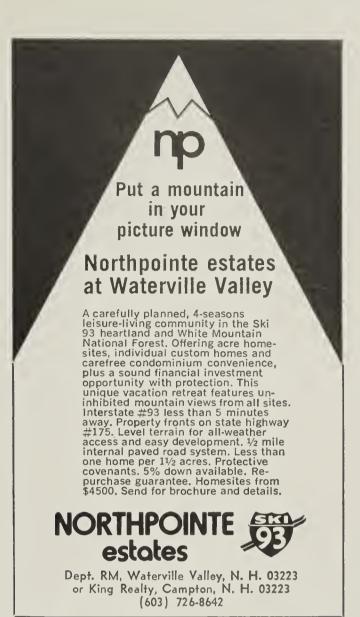
How do physicians like the practice of medicine in the Doctors' Houses? Dr. Hans Regner, the radiologist for the Göteborg group, enjoys foremost the freedom to make the professional decisions he did not have working in large government hospitals. Whether planning his work schedule or choosing which x-ray equipment to buy, the decisions that affect his day-to-day work are now his own. He also is happy that in this setting he has more personal contact with patients than he had in government hospitals.

For patients, Doctors' House provides more personalized medical service than the government hospital outpatient clinic, where the patient has no choice as to what doctor he will see, and he often has to wait months for an appointment. However, the quality care that Doctors' House provides is threatened by the increasing patient demand for the sort of care its personalized service generates. Many groups including unions and company executives have joined Doctors' House for their medical care; this increasing demand coupled with the limited supply of doctors means that the waiting period for an appointment has increased from one to two to four weeks. Whether or not the Doctors' House will continue to operate on a private basis is still an unanswered question.

PREVENTIVE MEDICINE

In Sweden demand is increasing for routine annual physical examinations to detect abnormal physical conditions before they manifest themselves as serious disease. Although such checkups are not covered by National Insurance, provisions are made for them in many new union contracts for workers. However, both the government clinics and the Doctors' Houses are too busy caring for the sick to do checkups on apparently healthy persons.

Another private medical group, Medicar, was established 15 years ago in Göteborg to perform "health control," routine annual screening physical examinations. Medicar doctors examine 6,000 individuals a year, less than 1 per cent of Göteborg's (Continued on next page)



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population. The Medicar group is located in the Carlanderska Hospital, the only private hospital now remaining in Göteborg. Its physicians are mostly older private practitioners.

Medicar doctors examine patients by taking medical histories with the aid of health question-naires, performing physical examinations, and interpreting the results of chest roentgenograms, electrocardiograms, urinalyses, and hemoglobin levels. The total charge to the patient is \$16. If these examinations detect unsuspected illnesses, such as diabetes or tnemia, the patients are referred either to a private physician or to a government outpatient clinic of their choice.

Thus, Medicar functions only to screen "healthy" persons for latent disease. After illness is detected, treatment is conducted elsewhere.

EMERGENCY CARE

The Director of the Emergency Medical Service (Larmtjanst) in Göteborg, Dr. Bjorn Lindholm, explained that two physicians with radios in their cars cover the entire city of Göteborg every night and weekend and make emergency house calls. For about 50 years the Larmtjanst was operated by the local medical society. After the Seven Crown Reform in 1970, Göteborg assumed official responsibility for the Emergency Service. However, the city still allows the medical society to operate the service as before. Doctors are assigned night or weekend coverage once a week, and for most, who have full-time government hospital appointments, it is a good source of extra income.

Each doctor on call sees 10 to 15 patients nightly; the service receives more than 15,000 telephone calls yearly. The *Larmtjanst* doctors do not respond to every call themselves; calls are all screened by trained operators. For example, an operator will send an ambulance to all patients complaining of chest pain, so they can be transported immediately to the hospital emergency room for evaluation of possible heart attack. Patients who are ambulatory, such as those with symptoms of a bladder infection, are advised to go to the hospital emergency room themselves.

The Emergency Service doctors visit younger patients with infection, such as flu and ear infection, patients with gastro-intestinal symptoms, children with exanthems, and patients with neurologic, psychiatric, and cardiopulmonary symptoms. The waiting period between the call and the doctor's arrival varied between 30 minutes and (Continued on Page 167)

200-E

PRIMARY MEDICAL CARE IN SWEDEN

(Continued from Page 166)

five hours. The operators assign the most seriously ill patients for the physicians to see first.

The cost to a patient for a house call is \$3; the physician is reimbursed an additional \$14 from the government for each call. Thus, with ten or more house calls a night a physician can supplement his salary considerably on the Emergency Service and thus be compensated for spending an entire sleepless night and then having to work the next day. Now there is a waiting list of physicians who want to work on *Larmjaist*.

How effective is Larmtjaust? Its primary usefulness is that it fills an immense vacuum in the Swedish medical care system, that is, the government makes no other provision for delivering home care to patients during nights and weekends. Both the District Medical Offices and the hospital outpatient clinics are closed at night. Swedish DMO's and hospital physicians, whose names are usually not listed in the telephone book, rarely receive telephone calls or make house calls for patients they have seen in clinic. Thus a sick patient without his "own doctor" (most Swedish patients), has two choices if he is sick at night — go himself to the hospital emergency room, which might mean a four-hour to six-hour wait, or call the Larmtianst.

The resources of a Larmjanst physician are limited to what little he can carry in his black bag. (Dr. Lindholm would like to see a wellequipped ambulance at the doctor's disposal, but this is a long way off.) Thus, seriously ill patients must be referred immediately to the hospital emergency room and many less seriously ill patients must be sent later to the hospital clinic or to a private specialist. The Larmtjanst is thus able to provide definitive care only for illnesses that are self-limited, such as viral, upper respiratory infections and childrens' rashes. One might question whether these minor illnesses are best treated by an emergency service. No provision is made for continuity of care. Under no circumstances will the physician who saw the patient at night provide subsequent follow-up care himself.

Thus, the Emergency Medical Service or Larmtjanst, although it does suffer from limited resources and lack of continuity of treatment, does fill a huge gap by providing rapid home medical evaluations for those who cannot come to the hospital at night.

AMBULANCE SERVICE

One excellent aspect of emergency medical services in Goteborg is a well-staffed city ambulance service equipped with 25 modern ambulances assigned by a central dispatcher. The ambulance attendants are city firemen, who have receive a minimum of three months of hospital training, two months of which are spent in the operating room assisting anesthesiologists and learning resuscitation techniques by first-hand experience. This background is invaluable when resuscitative procedures are necessary in homes or in the ambulance.

INDUSTRIAL MEDICINE

Another important area of nongovernmental primary medical care in Sweden is industrial medicine. The largest Swedish companies operate and finance their own clinics near their factories, and they stress preventive medicine as well as care for accident victims and workers with minor illnesses

I visited the Swedish Ball Bearing Factory (SKF), which employs 6,000 workers in Goteborg. Dr. Gunnar Edéus, Chief of the SKF Clinic, emphasized that the clinic one of the first and most complete in the country with a staff of four phy(Continued on next page)

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sicians and nine nurses, has prevention as its first priority. Audiograms to detect early hearing defects are compulsory for all workers using noisy machines, posters and seminars stress the use of ear plugs. Men who are exposed to lead and silica have periodic checkups to detect possible toxicity before symptoms occur. More than half the patients seen in the daily "sick call" are treated without the workers leaving their own factory area since nurses from the clinic make daily rounds to most production areas to screen and treat sick workmen. This frees the physicians to take care of the most seriously ill patients.³

HOSPITAL OUTPATIENT CLINICS

Swedish medical planners are placing increasing importance on outpatient clinics to relieve the pressures for beds in the hospitals.⁵ An estimated 50 percent of the 18.4 million ambulatory patient visits in 1966 were patients referred to hospital outpatient departments which are becoming increasingly busy each year.⁹ (Of the rest, approximately 25 percent are seen by DMO's and 25 percent by private physicians.)

Before the Seven Crown Reform in January

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1970 both hospital service chiefs and junior staff physicians had been permitted to see private patients in the clinics operated by each of the hospital's services as well as see "service patients." After the Seven Crown Reform, no physicians were permitted to see private patients in the clinics. Patients may no longer choose the physician they want to see but are randomly assigned a clinic doctor by the secretary and see a different doctor on every visit.

I talked to doctors and patients at the Outpatient Department of the Sahlgrenska Hospital about the change (Fig. 4). All patients I talked to complained about the long waiting time to get an appointment. At the General Medical Clinic (or Intake) in Göteborg this time ranges from three weeks for a "semi-emergency" to six months for a non-emergency. (In this clinic two internists see 15 to 20 patients each daily, but only 3 new patients, for a total of 6 new patients daily.) Most patients dislike not being able to request the physician of their choice and having to see a different one each visit. This was expressed by one girl, a diabetic laboratory technician, who regretted not having one doctor to relate to as she had when she worked in the United States. Now she was forced to repeat her medical history to a different physician on each visit. Another complaint was that all patients were told to report at one time (such as 9:00 a.m.), and they might have to wait several hours to see the doctor. For patients a clinic visit was a very impersonal "production line" experience.

The good result of the Reform for patients was on the financial side. Now patients pay only seven crowns (\$1.40) which covers doctors' services, and x-ray and laboratory costs. (The hospital is reimbursed an additional \$6 by National Health Insurance.)

Most of the staff physicians in the medical clinics were not happy with the effects of the Seven Crown Reform. Several frankly admitted that the total shift from private patients to randomly assigned "service patients," whom they see only for one visit, caused them to take much less of a personal interest in each patient. The doctors spent less time with each patient, scheduled the patient's return appointment at longer intervals, and referred the patients more readily to other clinics. No doctor questioned mentioned any improvement in the quality of the care since the Reform.

MATERNITY CARE

Prospective mothers have monthly appointments at the Obstetrics Clinic without charge. However, this requires several hours wait in the clinic, and the mother sees a different obstetrician at each visit. For an \$8 fee each time she can schedule her visits with the same obstetrician. This doctor, however, will not deliver her baby. After her ninthmonth visit, he will dismiss her from his care. If the delivery is uncomplicated, it will be performed in the hospital by a nurse-midwife whom the mother has not met. If complications are expected, an obstetrician is called. If some Swedish mothers miss the luxury of a "personal obstetrician," no objection has been made to the results which Swedish maternal care produces, the lowest infant mortality rate in the world.

HEART CLINIC

The one exception to the lack of personalized and continuous comprehensive care among the medical subspecialty clinics at the Sahlgrenska Hospital is the Myocardial Infarction Clinic. Before 1968 follow-up of heart attack patients was haphazard, according to Dr. Gosta Tibblin, Chief of the Infarction Clinic. Since Goteborg has only one general hospital, cardiologists have access to almost all the case histories of patients who had heart attacks in the entire population. Since 1962 Dr. Tibblin and his colleagues have been studying the epidemiology of myocardial infarctions. For instance, all the case histories of men born in 1913 in the city were studied to learn who had heart attacks and who did not to find the differences between the two groups.8

After 1968 Dr. Tibblin and other doctors, many of whom are working on project studies for their doctoral theses, organized the Myocardial Infarction Clinic to provide careful follow-up on all patients born after 1913 who have been treated for heart attacks.10 Each patient is followed by the same physician, nurse, and psychologist, who see him immediately after his heart attack, three months later, and then at yearly intervals or sooner if necessary. In addition to providing personalized care for each patient, the clinic teams are conducting controlled studies to learn whether some of the "risk factors" in infarct patients, such as obesity, lack of exercise, and smoking, will improve the patients' survival. In the new field of "preventive cardiology" the clinic staff is investigating screening the general population for heart disease, using mailed questionnaires to detect "risk

factors." Nonpatients suspected of heart disease by their responses are then examined in the Infarction Clinic.

The Staff of the Infarction Clinic is thus actively engaged in a comprehensive approach to the immense problem of heart attacks — from detecting unsuspected heart disease to treating and following patients after their heart attacks.

SUMMARY

I have seen the *mixed* aspects of primary medical care in Sweden — *government*-provided District Medical Officers, and salaried physicians in out-patient clinics at huge government run hospitals, on the one hand, and *private* physicians practicing in their own offices, multispecialty Doctors' Groups, preventative medicine centers, factories, and staffing the night Emergency Service. Care is available to *all* persons, and is financed through compulsory tax-financed health insurtnce. Problems do exist, such as poor coordination between ambulatory care and hospital care, since primary care physicians are seldom allowed to care for their patients in the hospitals.

Whether America in its current quest to improve delivery of medical care is able to adopt the (Continued on Page 172)

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ALONG THE ROAD TO VELLORE

(Concluded from Page 157)

seeming to be sitting literally all over the floor, and many of the babies are crying. However, the medical students disembark from the bus in an orderly fashion to go to their various assignments postings in the hospital.

Each day in South India is a new experience and a new adventure — very rewarding if one is interested in attempting to understand his surroundings. It would be quite depressing if we let these sights and smells, which are so overwhelming, get us down. I could not help wondering as I saw all these things happening before my eyes what a real impact the Christian hospital has in a predominantly and overwhelmingly Hindu population. Surely the people must recognize that the helping hand extended to them has been a fulfillment of the prayers of Dr. Ida Scudder, who dedicated this hospital, as well as the college and other institutions in the area, to the needs of the people of India.

* * *

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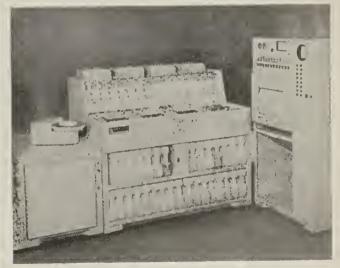
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PRIMARY MEDICAL CARE IN SWEDEN

(Concluded from Page 169)

good features of the Swedish system and avoid the undesirable ones will depend on how well we appreciate both Sweden's successes and her failures

ACKNOWLEDGMENTS

I wish to thank Docent David Lewis, M.D., of the Sahlgrenska Hospital in Goteborg, through whose kindness I was able to visit medical facilities and talk to medical personnel at all levels of medical care. My thanks to the many Swedish physicians, nurses, other medical personnel, and patients who spent time talking to me and showing me their little bits of Sweden. My thanks also to Drs. Morris Kerstein, Augustus White, and Per Eldh, who were kind enough to review the manuscript, and to Miss Mary E. Carr for her secretarial assistance.

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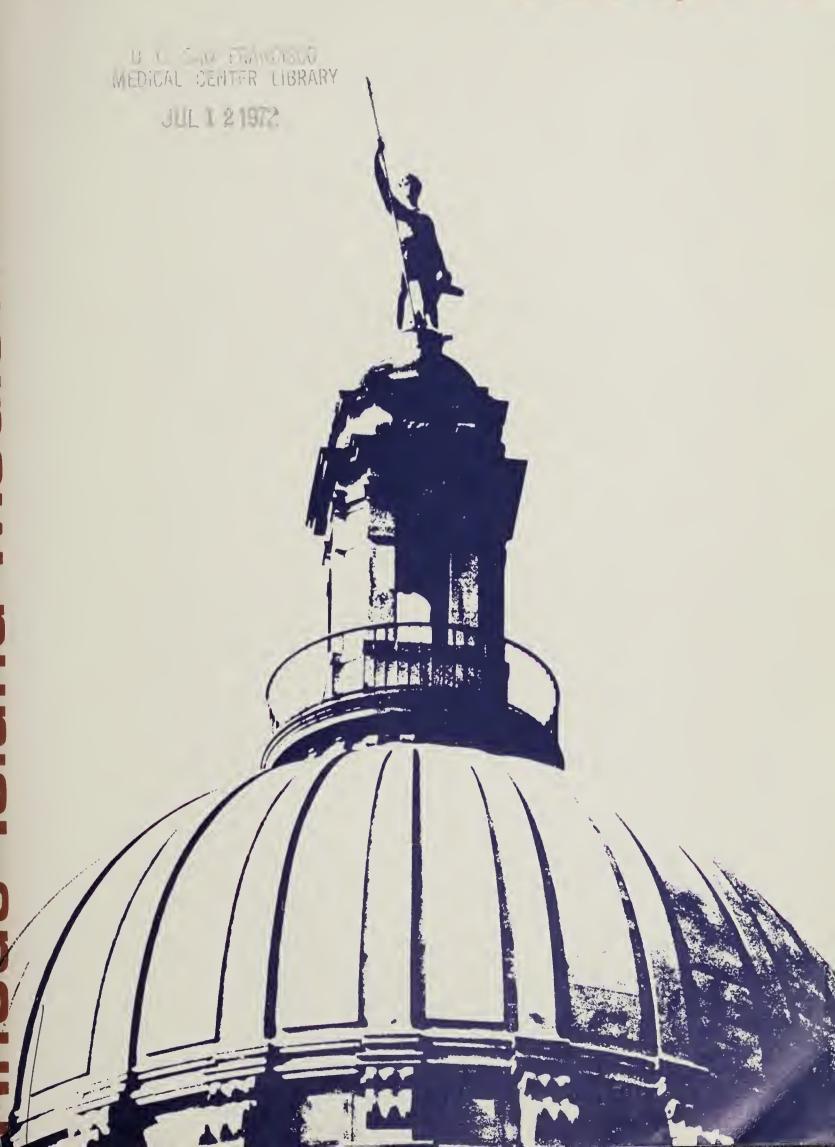
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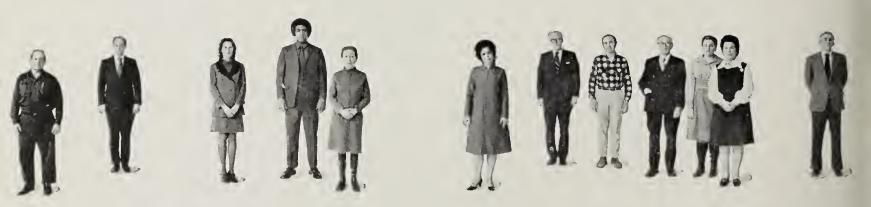




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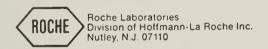
Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly re-

ported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.



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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who

are receiving appropriate therapy.

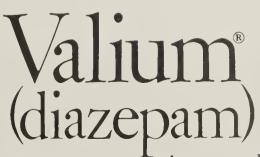
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexeited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term

Dosage: Individualize for maximum beneficial effect. Adults: Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. Geriatric or debilitated patients: 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) Children: 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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VOLUME 55, No. 6

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COVER: Independent Man - Fourteen Foot High, 500 lb. bronze statue designed by George T. Brewster, was cast by the Gorham Co. in six sections, and raised into place December 18, 1899. Originally to have been a likeness of Roger Williams, the idea was vetoed by Charles McKim, architect of the capitol building, because no adequate description of his appearance existed.

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Book Reviews

DOCTOR AND PATIENT AND THE LAW by R. Crawford Morris and Alan R. Moritz. Fifth Edition. The C. V. Mosby Company, St. Louis, 1971. \$24.50.

This book is the successor to a publication, bearing the same name, authored by Louis J. Regan, M.D., LL.B., of Los Angeles, California, who died in 1955.

It has become increasingly important to physicians in particular to become well acquainted with their responsibilities in the medicolegal field. The authors express the hope that their efforts will contribute to the "promotion of a more effective, sympathetic, and cooperative relationship between the medical and legal professions."

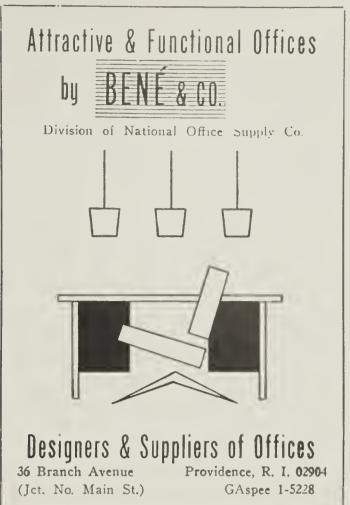
This is not an easy book to read. It contains a wealth of material, an enormous bibliography, and many legal forms which physicians would do well to use as models in their own practices. I especially recommend the chapter on "Liability for Unauthorized Treatment" in which there is a fine discussion of informed consent and the medicolegal implications of lack of informed consent. This particular phase of malpractice litigation seems to have become the rallying cry for plaintiff's lawyers and physicians should be thoroughly acquainted with this important device used against them in litigation.

The chapters on Medical Testimony are very interesting and worthwhile reading. Our adversary system of trial permits a vigorous attack on a doctor's testimony and allows question and challenge to their position at every turn. A well-prepared and knowledgeable physician need not fear this, and this book indeed gives him a tremendous wealth of material to bolster his knowledge and understanding of our adversary system.

Appendix A, "Professional Liability Vulnerability (self-test)" is a short exercise for the physician, and I commend it to all. It is an excellent method of evaluating your faults and areas of possible trouble.

Appendix B, "A Professional Liability Prevention Program." This short chapter is also most informative and, in outline form, imparts considerable self analysis. It also outlines the fundamentals of a constructive program.

This book is not for the casual reader. It requires great concentration and diligent study. It (Continued on Next Page)





is an excellent reference book. If one wishes to investigate a particular aspect of a medico-legal problem, the basics are here, and the bibliography will point the way to more complete investigation:

"All readers using this edition would be well advised to check local sources for changes occurring since January 1, 1971, concerning anything contained herein, especially of course, statutory requirements and perhaps to a lesser extent, medical tests themselves.

Truly, time has now become a fourth dimension in our lives."

NATHAN CHASET, M.D.

ANGLO-AMERICAN CONFERENCE ONMEDICAL CARE. Proceedings of a Conference sponsored jointly by the Royal Society of Medicine and the Royal Society of Medicine Foundation, Inc., held at 1 Wimpole Street, London, 5-7 April, 1971. London, The Royal Society of Medicine, 1971. \$5.00.

Anyone interested in the pros and cons of National Health Insurance can find an adequate discussion in these various speeches. Among those who gave papers at the Conference were Walter C. Bornemeier, Wilbur J. Cohen, John H. Knowles, J. Enoch Powell, and Elliot L. Richardson.

The Royal Society of Medicine Foundation, Inc. was established "to promote cooperation between members of the medical profession (practitioners and research workers alike) in the United States and in Britain and also to enable the academic, scientific and practical experience of the profession in both countries to be pooled . . ."

CHARLES E. MILLARD, M,D.

CODE FIVE by Frank G. Slaughter. Garden City, New York, Doubleday & Company, Inc., 1971. \$5.95.

The fast moving events, almost miracles, center about a war-injured surgeon, Jud Tyler, with an injured right hand.

Induced by his former chaplain in Vietnam to join him in a manufacturing city to work among the poor, ill, and injured, Jud helps to restore a run down hospital into a going concern with a hopeful future.

Medical emergencies are handled with up-todate techniques. The slum landlords who refuse to remove lead paint from the walls, which is causing illness among the poor, are vigorously dealt with.

Many contemporaneous problems are brought out: such as, the lack of employment of colored (Continued on Page 178)

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or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

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Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal. Usage in Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of ane

teratogenic studies with high multiples of the human dose have been negative. Usage In Children: Not recommended for use In children under 12 years of age. Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. Cardiovascular: tachycardia, palpitation, elevation of blood pressure. Gastrointestinal: nausea and vomiting, diarrhea, unpleasant taste, constipation. Endocrine: changes in libido, impotence. Autonomic: dryness of mouth, sweating, mydriasis. Allergic: urticaria. Genitourinary: diuresis and, rarely, difficulty in initiating micturition. Others: Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

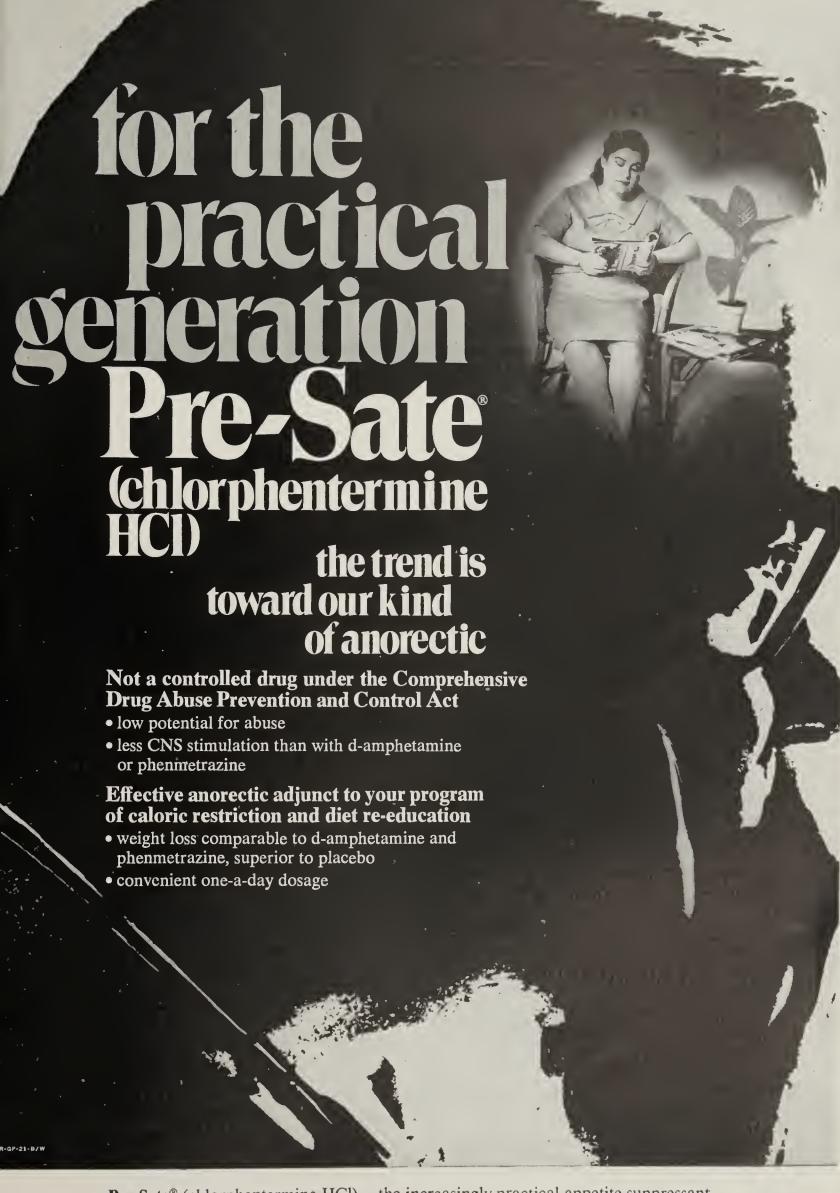
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

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people in factories, the tensions between the violent and nonviolent blacks, health hazards due to dust in factories.

Throughout runs a love story resulting in curing Jud's temporary impotence.

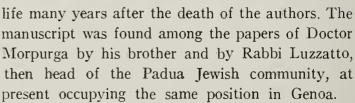
When forced to operate on his old friend, the chaplain, Jud finds his surgical skill is restored.

The general public might find too much technical medicine and details. The characters seem to me to lack reality, probably due to the fast-moving plot.

MERLE M. POTTER, M.D.

MEDICI E CHIRURGHI EBREI DOTTORATI E LICENIATIZI NELL'UNIVERSITA DI PADOVA DAL 1617 AL 1816, (Jewish physicians and surgeons graduated from the University of Padua from 1617 to 1816) by Abdelkader Modena and Edgardo Morpurgo. Bologna, Forni Editore, 1967. (In Italian.) Lire 6,000.

Vittore Colorni of the University of Ferrara tells how the work of Modena and Morpurgo came to



The work originated from the collaboration of librarian Abdelkader Modena, who patiently assembled the files of Jewish graduates and students of the University of Padua from 1617 to 1816, and Doctor Morpurgo, who added a lot of information, including their many scientific publications in Italian, Latin, and Hebrew.

Modena died in 1919 annd Morpurgo in 1942, and the manuscript was found only a few years ago.

The degrees were in philosophy and medicine, and the licenses in surgery. A doctorate in law would have offered nothing to a Jew, since political appointments, the practice of law, and commissions as notary were not open to them.

(Continued on Page 179)

RHODE ISLAND MEDICAL JOURNAL

BOOK REVIEWS

(Continued From Page 178)

On the other hand the Jews, regulating themselves according to the biblical-talmudic-rabbinic laws, had no interest in Roman law.

Ladislao Münster, professor of history of medicine in the University of Ferrara, contributed greatly to the work.

Among the approximately 400 names, some are familiar, such as Bachrach, Barzilai, Coen, Fermo, Foa, Ben Porad, Fano, Geiger, Israel, Jona, Levi, Luzzatto, Lumbroso, Morpurgo, and Winkler.

A distinguished descendant, Professor Jona, chief of medicine in the hospital of Venice when the reviewer of this book was serving his internship, committed suicide at the promulgation of the anti-Jewish laws.

A valuable historical publication.

F. Ronchese, M.D.

AMERICAN MEDICINE IN CRISIS by Edward P. Luongo, M.D. New York, Philosophical Library, 1971. \$9.95.

This is an excellent review of the history of medicine and the recent tremendous eruption of medical problems. It includes hundreds of analytical studies, starting with ancient medical therapy and such fascinating facts as how Imhotep trephined burr holes in the human skull on the banks of the Nile 60 centuries ago. Imhotep was worshiped as God by Egyptians for centuries after his death. Hippocrates sought to attain a balance between patient and environment, for example diet with pork, mutton, and lamb for poor and peasant and exercise — long walks, t.i.d. — for rich people.

The writer wanders among these facts until he has defined health as the capacity of the human organism to be reasonably free from pain, discomfort and disability, limitation of action, and social incapacity. There is a wide-ranging analysis of medical terms and an examination of prognosis through the generations. His discussion of cancer is excellent. In Chapter III, the author discusses the crisis in medicine in relation to medical students and their current education. They become passive participants in a learning process by studying systems didactically. They know bits of knowledge which they consider, "hundreds of pearls of wisdom" and list them in a small black notebook ready for reference in preparation for examination. So while the student may learn very little about magnesium metabolism in a lecture, he knows 20 causes of magnesium deficiency in the human body.

There is a discussion of various aspects of the crisis in medicine such as loss of caritas and loss of sincerity in relation to the patient. The author (Concluded on Page 202)



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District Medical Society Meetings

PROVIDENCE MEDICAL ASSOCIATION

The 125th Annual Meeting of the Providence Medical Association was held in the Providence Biltmore Hotel in Providence, R. I. on Wednesday, January 5, 1972. A reception and cocktail hour was held in the Mansion Room of the hotel, after which the members and their wives adjourned to the Garden Room for dinner, and the business meeting.

Dr. David Freedman, President, called the 125th annual meeting to order at 9:15 p.m. He introduced Dr. William J. MacDonald, President of the Rhode Island Medical Society, and Mrs. MacDonald; Dr. Wilfrid V. Ethier, President of the Woonsocket District Medical Society, and Mrs. Ethier; and Dr. Victor deMedeiros, President of the Bristol County Medical Association, and Mrs. deMedeiros, all of whom were guests of the Association. He noted that the President of the other district societies in the State had been invited to attend, but were unable to do so.

ANNUAL REPORT OF THE SECRETARY

Dr. Thomas F. Head, Secretary, read his annual report, copy of which is made part of the official minutes of the meeting.

Action: A motion was made, seconded and voted that the annual report of the Secretary be received and placed on record.

ANNUAL REPORT OF THE TREASURER

In the absence of Dr. John B. Lawlor, the Treasurer, Doctor Head read the annual report for 1971 of the Treasurer, copy of which is made part of the official minutes of the meeting.

Action: A motion was made, seconded and voted that the annual report of the Treasurer be approved and placed on record.

REPORT OF THE EXECUTIVE COMMITTEE

Dr. Thomas F. Head, Secretary, reported as follows:

1) That the Executive Committee recommends for election to active membership in the Association the following applicants:

Earl T. Anderson, M.D.
Janet O. Bernstein, M.D.
Joseph P. Bellino, M.D.
George N. Cooper, Jr., M.D.
Karl E. Karlson, M.D.
Louis R. Maiello, M.D.
Henry L. Pache, M.D.

Gennaro F. Pasquariello, M.D. Srecko Pogacar, M.D. Patricia A. Rompf, M.D. Eugene A. Russo, M.D. H. Denman Scott, M.D. Joel B. Singer, M.D.

Action: A motion was made, seconded, and voted that the applicants recommended by the Executive Committee for active membership be elected.

2) That the Executive Committee had recommended to the membership certain bylaw revisions which were published and distributed with the announcement of the annual meeting. No objections were made to the Association regarding the proposed revisions, and therefore a vote from the membership was in order.

Action: A motion was made, seconded, and voted that the bylaw revisions as submitted to the membership in writing by the Executive Committee, be adopted. (Copy of the bylaw revisions is made part of the official minutes of this meeting.)

John E. Farrell has served the Association as its executive secretary since June 1, 1938, and that he had been made an honorary member of the R. I. Medical Society in 1966, now recommends that Mr. Farrell be elected an honorary member of the Providence Medical Association in recognition of his long and loyal service.

Action: A motion was made, seconded and voted by a standing acclamation of the members present that John E. Farrell be elected an Honorary Member of the Providence Medical Association.

PRESIDENTIAL ADDRESS

Doctor Freedman delivered his presidential address on the subject of "Medical Care and Our Sick Society".

The members gave Doctor Freedman a standing ovation upon the completion of his outstanding discourse on the medical and health problems of the present day. (The adddress was published in the R. I. Medical Journal, and thereby became a permanent part of the records of this meeting.) (Continued on Page 181)

PROVIDENCE MEDICAL ASSOCIATION

(Continued From Page 180)
ELECTION OF OFFICERS FOR 1972

Doctor Head reported that the slate of nominees for Officers of the Association, and for Delegates to the House of Delegates of the R. I. Medical Society, had been submitted in writing to the membership in accordance with the bylaws, and he also reported that he had received no counter nominations.

Action: A motion was made, seconded and voted that the slate of nominees, as proposed, for Officers and delegates of the Association, for 1972 be adopted, and the nominees declared elected.

* * *

Doctor Freedman named Drs. John Ham and Robert Baldridge, past presidents of the Association, to escort Dr. Joseph E. Caruolo, the newly-elected President, to the podium. Doctor Caruolo briefly addressed the membership and asked for continued support of the Association during 1972. He then presented Doctor Freedman with a suitably engraved gavel as a gift from the membership.

AWARD OF MEMBERSHIP CERTIFICATES

Doctor Freedman presented certificates of membership in the Association and also the Rhode Island Medical Society to physicians present who had been elected to active membership during 1971.

ADJOURNMENT

The meeting was adjourned at 10:35 p.m., and the members and their wives enjoyed the dance music of Ralph Stuart's Orchestra until 11 p.m.

Respectfully submitted:

THOMAS F. HEAD, M.D. Secretary

WASHINGTON COUNTY MEDICAL SOCIETY

The quarterly meeting of the Washington County Medical Society was held at the Larchwood Inn, Wakefield, Rhode Island, on January 12, 1972.

The meeting was called to order by Doctor Goldberg, President, at 11:40 a.m. Members present were Doctors Angelli, Boyd, Burbelo, D'Agostino, Gale, Goldberg, W. Johnson, L. Johnson, Kraemer, LaPere, Manganaro, MacIver, McGrath, Menzies, Morrone, O'Neil, Palaia, Potter, Pysario, Robinson. Siegmund, Tang, and Walsh.

It was moved by Doctor McGrath and seconded

(Continued on Next Page)



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by Doctor Walsh that the minutes of the last regular meeting be accepted as printed and distributed, and so passed.

COMMUNICATIONS

Several communications were read along with three applications to the Society. They were turned over to the Credentials Committee to be acted on later.

COMMITTEE REPORTS

Doctor Agnelli reported that at the last Council meeting the question of Optometrists being allowed by legislation to diagnose and to treat eye problems was being discussed, and they recommended that they support the Rhode Island Ophthalmological Society in its plan to question through court action the constitutionality of the legislation.

Doctor Kraemer moved, and it was seconded by Doctor O'Neil that the Council members and delegates be instructed that the Society endorses the action of the Council and House in regard to the action being taken on the Optometry question.

Doctor McGrath reported from the House that a statewide peer review organization would be established — a permanent committee — to study the whole peer review problem; that is, quality, cost, and utilization of medical care in the community.

NOMINATING COMMITTEE

The following slate was put forth by the Committee for the year 1972:

President: Gregory Burbelo, M.D.

1st Vice President: Alfred Gobeille, M.D.

2nd Vice President: Robert Knisley, M.D.

Secretary: Francis Palaia, M.D.

Treasurer: William McDermott, M.D.

Representative to the Council: F. Bruno Agnelli, M.D.

Representative to the House: James McGrath, M.D., 1 year; Joseph Ruisi, M.D., 2 years; John Elliot, 3 years.

Executive Committee: Gordon Menzies, M.D., Mildred Robinson, M.D., Erwin Siegmund, M.D.

Credentials Committee: Attilio Manganaro, M.D., John Pinto, M.D., Jacob Pysario, M.D.

Peer Review Committee: John Walsh M.D., Louis Morrone, M.D.

A motion to accept the nominations was made by Doctor Walsh and seconded by Doctor D'Agostino, and it was so passed.

No old business was discussed.

(Concluded on Page 202)

"The history of science, and in particular the history of medicine...is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

 George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

drugs of choice?

Results of a survey of physicians:

13.3% Yes, it would be useful.

86.7% No, it would not be useful.

Opinion & Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial dif-

ferences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain

segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise stateinents of *relative* efficacy are very difficult to makemuch more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to deter-mine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy

in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

Kenneth G. Kohlstaedt, M.D., that the established prod-Vice President, Medical Research, Eli Lilly and Company



In my opinion, it is not the function of any government or private regulatory agency to designate a "drug of choice." This determination should be made by the physician after he has received full information on the properties of a drug, and then it will be based on his experience with this drug and his knowledge of the individual patient who is seeking treatment.

If an evaluation of comparative efficacy were to be made, particularly by government, at the time a new drug is being approved for marketing, it would be a great disservice to medicine and thus to the patient -the consumer. For example, when a new therapeutic agent is introduced, on the basis of limited knowledge, it may be considered to be more potent, more effective, or safer than products already on the market. Conceivably, at this time the new drug could be labeled "the drug of choice." But as additional clinical experience is accumulated, new evidence may become available. Later, it may be apparent

ucts should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for

every human being. The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B₁₂ as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. How-

ever, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use information that the pharmaceutical manufacturers must begin to provide if government regula-tion of "drugs of choice" is to be avoided.

Opinion Dialogue

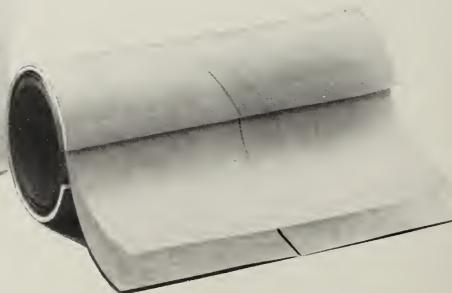
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Sex Development Abnormalities

Careful Examination And Pedigree, Chromosome, Laboratory, And X-ray Studies Will Elucidate Clinical And Genetic Situations

By Stanley L. Inhorn, M.D.

To understand the abnormalities of sex development that are seen in clinical practice, the physician must appreciate a few basic facts regarding normal gonadal and genital differentiation. Gonads develop early in embryonic life as a thickening of the coelomic epithelium along the mesonephric ridge. Male sex development is related to strong male sex determinants on the Y chromosome, which result in testicular differentiation involving the medullary portion of the gonad. All male somatic cells normally have 46 chromosomes. including one X and one Y chromosome. Germ cells multiply in the embryonic testis and eventually become located in the primitive seminiferous tubules. Ovarian development occurs in the absence of a Y chromosome, with the normal female having 46 chromosomes, including two X's.

STANLEY L. INHORN, M.D., Directer, Wisconsin State Laboratory of Hygiene; Professor, Preventive Medicine and Pathology, University of Wisconsin.

One of a series of lectures in early 1971 arranged by the laboratory directors of the Rhode Island, St. Joseph's, Roger Williams General, and The Miriam Hospitals as part of the Cooperative Laboratory Pregram sponsored jointly by the Rhode Island Department of Health and the Regional Medical Program of the United States Department of Health, Education, and Welfare. Other papers in this series appeared in the October 1971 issue of this Journal.

Ovarian development involves primarily the cortex, in which germ cells multiply until the maximum number is achieved late in embryonic life. Medullary remnants generally persist in the hilar region of the ovary¹.

Internal and external genitalia of both sexes develop from the same indifferent primordial structures. The major anlagen of the male internal genitalia are the mesonephric or Wolffian ducts, which in the female become Gartner's ducts and other vestigial structures. The Mullerian ducts in the female give rise to the Fallopian tubes, uterus, and upper vagina, while in the male they involute. Thus both sexes have double sets of gonaducts, with one system differentiating in each, and the heterologous system regressing. Corresponding portions of the external genitalia also derive from identical primordial structures. Differentiation of the internal and external genitalia is dependent on isosexual gonadal differentiation. Testicular tissue usually induces male genitalia, while ovarian tissue induces female genitalia. Experimental studies and clinical observations have shown that absence of gonadal tissue will result in development of apparently normal female genitalia².

The sex chromosomes are responsible for sex determination by initiating gonadal development, (Continued on next page)

testicular with XY and ovarian with XX sex chromosomes. Sex differentiation refers to all the processes which result in anatomical and functional differences between the two sexes. They include differences at various levels: the somatic, gonadal, internal genital, external genital, psychosexual, and secondary sexual characteristics. It should be emphasized that the sex chromosomes are not the only factors responsible for sex development. While sex chromosomal aberrations may cause mild to severe abnormalities of sex development, aberrations of the autosomes (the other 44 chromosomes) may also produce developmental defects. Furthermore, genic mutations and environmental factors are responsible for even a larger number of abnormalities of sex development than are all types of chromosomal aberrations combined.

Abnormalities of sex development may involve the gonads, the genitalia, somatic and psychosexual development, or the secondary sexual characteristics. One or more facets of sex developmay be involved. Gonads may be aplastic or hypoplastic. The terms "gonadal dysplasia" or "dysgenesis" are non-specific, referring to imperfect development of one or both gonads, and the condition need not be associated with abnormal internal or external genitalia. Ovarian dysgenesis indicates defective germinal or endocrine development; it does not necessarily refer to the Turner hypoplastic "streak" ovary. Testicular dysgenesis results in hormonal or germinal incompetence with or without incomplete genital development in individuals with Y chromosomes. The degree of dysgenesis is often measured by the size of the testes. The testes may be cryptorchid, or their incompetence may become apparent only at puberty or later in life, recognized as an infertility problem.

When internal and especially external genitalia are defective, the condition may be apparent at birth or later. Ambiguous genitalia, arising from the common primordial structures, give rise to a problem known as "intersexuality". Incompletely differentiated male external genitalia or differentiation of female genitalia in a male direction may involve one or both ductal systems or the other indifferent primordia. Rarely are these individuals true hermaphrodites, who have, by definition, testicular and ovarian tissue, often with abnormal internal genitalia but usually without intersex external genitalia. More often they are classified

Table I ETIOLOGY OF SEX DEVELOPMENTAL ABNORMALITIES

- I. Sex Determination
 - A. Sex Chromosomal Abnormalities No Y Present.
 - 1. Numerical Aberrations of X. Turner syndrome (XO) or supernumerary X's.
 - 2. Structural Aberrations of X.
 - B. Sex Chromosomal Abnormalities Y Present.
 - 1. Additional X's, with one or two Y's.
 - 2. Structural Aberrations of Y.
 - 3. Mosaicism with XY cell lines.
- II. Sex Differentiation
 - A. Genetic (Mendelian) Mutations
 - 1. Male Pseudohermaphroditism several syndromes.
 - 2. Female Pseudohermaphroditism several syndromes.
 - B. Environmental Causes
 - 1. Male Pseudohermaphroditism e. g. maternal estrogen
 - 2. Female Pseudohermaphroditism e. g. maternal testosterone
 - C. Multifactorial Causes Genetic Environmental Interactions mostly unrecognized etiologies
 - 1. Male Pseudohermaphroditism most cases of hypospadias
 - 2. Female Pseudohermaphroditism

as "pseudohermaphrodites", having gonads that are congruent with their chromosomal sex, but with internal or external genitalia or both that are abnormal or intersexual. Thus, where true hermaphrodites may not have intersex genitalia, pseudohermaphrodites always do.

Many cases of abnormal sex development are detected when they become apparent as functional derangements. Conditions such as amenorrhea or lack of maturation at time of puberty may represent one or more defects of gonadal or genital development. Infertility and sterility may be reflections of ovarian or testicular dysplasia or of genital anomalies. Reproductive failure may also be manifest as spontaneous or habitual abortion, sometimes related to genetic or anatomical defects.

TURNER'S SYNDROME

This sex developmental condition, also known as the Ullrich-Turner Syndrome, is extremely interesting from several viewpoints. First, it is caused by the absence of a second sex chromosome (45, XO) or by the structural alteration of the second X. These chromosomal defects result in the development of dysgenetic gonads, sometimes referred to as "streak ovaries". As a consequence of gonadal dysplasia, there is hypoplasia of the genitalia in these phenotypic females. They therefore

exhibit primary amenorrhea and are sterile. It is important to note that the abnormalities are not limited to the genital system, for all affected individuals have a number of defects, involving the head and neck, trunk, and extremities. Primordial shortness of stature is striking, and while redundancy of the skin of the neck is common, it is not present in all cases. Most patients have a dozen or more anomalies. Many are minor defects, but others such as coarctation of the aorta may be life threatening³. Despite the multiple congenital anomalies, brain development is often unimpaired, and intelligence is usually in the normal range. The lack of an increase in maternal age at conception, plus the high frequency of mosaicism, suggests that many XO cases arise as a loss of one sex chromosome after fertilization. When young girls are observed to have shortness of stature with only a few of the defects sean in the "typical" Turner's syndrome, one has to be suspicious of a possible mosaicism with a normal 46, XX cell line. This common condition may result in a buccal smear analysis that is not sex chromatin negative. Structural X chremosomal defects may also result in individuals who have severe or mild forms of Turner's syndrome. Studies of patients with isochromosomes, deletions, fragments, rings, and translocations of the X give evidence that factors necessary for normal gonadal development and for protection against the Turner's defects are located on the short arm of the X. Autoradiographic labeling with tritiated thymidine show that the long arm of the second X is late labeling, which according to the Lyon hypothesis corresponds to the genetically inert material that is also recognized as the sex chromatin body. Because of the many structural and numerical X aberrations that are as ociated with Turner's syndrome, sex chromatin may be an unreliable indicator of the true chromosomal constitution. Two final points about the Turner's syndrome. The first observation is that ovaries in embryonic and neonatal Turner patients have been found to contain ovocytes, which indicates that ovarian development does occur, but that involution progresses rapidly beginning in the fetal period. Finally, it should be pointed out that Turner's syndrome is a relatively lethal condition, since about 5 per cent of all spontaneous abortions have been found to have the 45, XO constitution4.

SUPERNUMERARY X SYNDROMES

While individuals with 4 or 5 X's have severe types of congenital malformation syndromes, females with three X's (47, XXX) are remarkable in that they usually have few or no abnormalities. Sex development is generally normal; although menstrual irregularities may occur. These individuals are often mentally retarded and may be detected on sex chromatin surveys of mental institutions.

KLINEFELTER'S SYNDROME

The introduction of buccal smear and chromosome techniques enabled investigators to differentiate between certain types of hypogonadism and to determine the true phenotypic spectrum of the Klinefelter syndrome⁵. Sex chromatin surveys, carried out in newborns, on institutionalized patients, and in sterility clinics, have shown that Klinefelter's Syndrome, due to an extra sex chromosome (47, XXY) or one of its cytogenetic variants (mosaicism, polysomy X with one or two Y's) is almost as common as mongolism. The incidence is approximately 1/500 newborn males, with increased maternal age being significant, in contrast to Turner's syndrome. The maternal age effect accounts for those XXY patients which arise by nondisjunction during meiosis in the ovocyte. Klinefelter's syndrome is characterized by few major or minor malformations. The patients have small testes, with reduced or absent spermatogenesis. If testicular atrophy is not prominent, mosaicism with a normal cell line should be considered. At puberty these individuals often develop eunuchoidal body proportions, with gynecomastia. Secondary male sex characteristics generally do not develop rormally. Mental retardation and personality problems may require medical or institutional care. Since sex chromatin only permits determination of the number of X chromosomes present, chromosome studies are required to determine whether more than one Y is to be found in the chromosome constitution. A new fluorescent technique employing derivatives of quinacrine permit identification of Y chromosomal material in interphase cells as well as in metaphase plates. This procedure will thus enable investigators to obtain a better definition of the XYY constitution, which has been associated with aggressive, psychopathic behavior, often in tall men.

(Continued on Next Page)

OTHER CHROMOSOMAL SYNDROMES

Turner's and Klinefelter's syndromes are major considerations in such clinical situations as growth retardation, amenorrhea, infertility, abnormal secondary sex development, and mental retardation. In the clinical condition known as "intersexuality" or "pseudohermaphroditism", these and other chromosomal syndromes are not common causes. Two aberrations which may result in intersex genitalia are deletions of the Y chromosome and XO/XY mosaicism. A review of the reported cases of Y deletion revealed that this aberration could result in intersex genitalia in individuals who were raised as males or females1. XO/XY mosaicism is more common than the deleted Y, and it often results in gonadal and genital anomalies. Often these patients have features of the Turner's syndrome, although the condition has a broad phenotypic spectrum ranging from normal male to normal female genitalia. They most commonly possess a streak-like gonad on one side, with a dysgenetic testis on the other. Unless some definite ovarian remnants can be identified, they cannot be classified as true hermaphrodites. True hermaphrodites may have a variety of somatic and genital abnormalities. Most have an XX sex chromosome constitution, although mosaicism is not unusual. One of our cases was found to have mosaicism with a ring Y chromosome. Another hermaphrodite, with a 46, XX karyotype, was discovered to have gonadoblastomas in both ovotestes. Tumor development is a danger that must be considered in all patients with dysgenetic gonads.

GENETIC MENDELIAN MUTATIONS

Factors in the uterine environment, related to abnormal physiological processes, may be responsible for early errors in sex development. Systemic illnesses of the mother may also affect the numerous processes of organogenesis in the embryo. External environmental agents can produce mild to severe effects on fetal growth. Rubella, thalidomide, sex hormones, and radiation are some of the agents that have known effects on embryonic development. More difficult to ascertain are some of the more subtle influences, where multiple genetic factors operating in concert with mild environmental insults result in congenital abnormalities. Certainly most cases of male pseudohermaphroditism, the severe hypospadiases, fall into this category. Sex abnormality syndromes which are caused by genetic nonchromosomal mutations may also be difficult to diagnose unless a careful pedigree is established and close family members are examined. Conditions such as the adrenogenital syndrome are well known to the practicing pediatrician, and biochemical procedures have been devised to help in their diagnosis. More than 20 other genetically-determined syndromes of abnormal sex development have been described. Many of these have not been as well defined as adrenogenital syndrome complex, since some have been based on the study of just a few families.

EXAMPLES OF GENETIC SEX ABNORMALITIES

The Feminizing Testes Syndrome is relatively common and can be readily recognized from the clinical appearance and pedigree. The patients have female external genitalia, but have a short vagina with hypoplastic internal genitalia. Wolffian duct structures are also severely hypoplastic. Testes are present in the inguinal area or remain intra-abdominal. At puberty there is development of female secondary sex characteristics, although primary amenorrhea or sterility will eventually bring these individuals to the attention of a physician. Paucity of axillary or pubic hair, eunuchoid body proportions, and genital abnormalities will suggest the diagnosis. Sex chromatin and chromosome studies showing an XY constitution and pedigree analysis, which will reveal sterile "aunts" and a 3:1 ratio of girls to boys in the related sibships, will confirm the diagnosis.

Another condition, not to be confused with the feminizing testes syndrome, is *Swyer's Syndrome*, or familial gonadal dysgenesis in XY phenotypic females. These individuals have female internal and external genitalia, since testicular dysgenesis occurs very early in embryogenesis, so that genital differentiation is female. These patients also have primary amenorrhea, but do not feminize after puberty.

Pseudovaginal Perineoscrotal Hypospadias is characterized by a poorly-developed penis, with severe hypospadias and a vaginal rudiment. Normal testes are found in the cleft scrotum. The condition is an autosomal recessive in XY males, and it may be seen in siblings. Presumably the urogenital sinus and genital tubercle are resistant to testosterone effect.

A condition described in 1964 known as the *Smith-Lemli-Opitz Syndrome* has a variety of malformations, mental retardation, growth failure, along with severe hypospadias annul cryptorchirdism in most affected males. Some males have been

incorrectly assigned female names at birth. The condition has been found to be familial, and it is a good example of a genetic mental retardation-multiple congenital malformation syndrome in which genital abnormalities are part of a more extensive problem. Another interesting condition is the *Opitz Syndrome* in which hypertelorism and hypospadias have been found in sibships, transmitted by mothers who themselves have hypertelorism.

The Syndrome of Familial Gonadal Dysgenesis with Shortness of Stature or Lenz Syndrome is found in several members of a sibship. The females with a 46, XX constitution have multiple minor anomalies in addition to their primary gonadal dysgenesis. Males are also affected and may have testicular hypoplasia.

A final example of a multiple malformation syndrome in which gonadal dysgenesis is often present is Noonan's Syndrome. This condition is of particular interest because it shows how serious errors in classification can occur without a proper genetic evaluation. Over 75 different congenital anomalies have been described in this syndrome, but because of webbing of the neck and several other features in some patients, often the condition is confused with Turner's syndrome. Before chromosome studies became available reports of the "male Turner's syndrome" created considerable confusion, which still persists today in many quarters. These unfortunate misconceptions result from the similarities between the two syndromes, because some physicians fail to realize that many

congenital anomaly syndromes share the same defects and that no anomaly is pathognomonic for a given syndrome. Whenever one is dealing with a multiple anomaly syndrome, one must realize that individuals will vary in terms of the number and severity of defects. If a patient does not have the prominent anomalies often associated with that syndrome, his condition may be completely misdiagnosed.

Thus, evaluation of patients with dysmorphogenetic syndromes, involving the genitalia or not, must include a complete and careful physical examination, a detailed pedigree analysis, chromosome studies, and as many laboratory analyses and x-ray studies as are required to fully define the clinical and genetic situations. Only by a thorough approach to the abnormalities of sex development will the true biological spectrum be established for each nosologic entity.

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Primary Immunodeficiency Diseases

Remarkable Progress Made In Understanding Of Cellular Mechanisms Of Immunity

By Fred S. Rosen, M.D.

During the past decade remarkable progress has occurred in our understanding of cellular mechanisms of immunity both at the experimental and clinical levels. The following conclusions firmly rest on experimental and clinical observations.

- 1. All potentially immunocompetent cells are derived from the bone marrow.
- 2. In early embryonic life, a subpopulation of bone marrow stem cells emigrates to the thymus gland where these cells multiply, mature, and acquire the capacity to function.
- 3. Thymus-derived lymphocytes (T cells) mediate cellular immunity; i.e., graft rejection annud delayed hypersensitivity. They are long-lived cells and also bear immunologic memory.
- 4. Other cells emigrate from the bone marrow to become antibody synthesizing cells (B cells). Nothing analogous to the thymus has been identified in man. That is, no discrete organ is known to affect the maturation and function of B cells.

The immunodeficiency diseases can be regarded as defects in (1) T cells, (2) B cells, or (3) bone marrow stem cells, which are the precursors of T and B cells. Table I lists the clearly described syn-

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One of a series of lectures in early 1971 arranged by the laboratory directors of the Rhode Island, St. Joseph's, Roger Williams General, and The Miriam Hospitals as part of the Cooperative Laboratory Program sponsored jointly by the Rhode Island Department of Health and the Regional Medical Program of the United States Department of Health, Education, and Welfare. Other papers in this series appeared in the October 1971 issue of this Journal.

dromes by the official designation assigned by a committee of the World Health Organization.

Two illustrative defects in cellular immunity are discussed below as examples of the failure of cellular immune function — a pure T cell defect (congenital thymic aplasia) and a stem cell (severe combined immunodeficiency).

CONGENITAL THYMIC APLASIA (DiGeorge's Syndrome)

During the sixth week of embryonic life the thymic primordium arises from the floor of the third pharyngeal pouch and to a lesser extent from the fourth pharyngeal pouch. The endodermal epithelial masses rapidly elongate, moving down into the neck, and fuse in the midline behind the thyroid primordium in the eighth week of embryonic life. By the 12th week, the gland comes to occupy its ultimate position in the anterior mediastinum, the epithelial cells have formed Hassall's corpuscles, and the primordium has been invaded by proliferating lymphoblasts.

While the thymus gland is forming, the parathyroid glands arise simultaneously from the third and fourth pharyngeal pouches and start their migration to a position posterior to the thyroid primordium. During this same period the nasomedial processes fuse to form the philtrum of the lip, and the ear tubercles around the hyomandibular cleft form into the external ear.

DiGeorge pointed out that a congenital anomaly may result from the failure of embryogenesis of the entodermal derivatives of the third and fourth pharyngeal pouches — aplasia of the parathyroid

Table 1 WHO Classification of the Primary Immunodeficiency Diseases

	cells	cells	cells
	B cellsB cells	T	Stem cells
	22		
Infantile X linked agammaglobulinemia	+		
Selective immunoglobulin deficiency	+		
Transient hypogammaglobulinemia of infancy	+		
X-linked immunodeficiency with hyper	.1		
IgM	+		
Thymic hypoplasia (pharyngeal pouch			
syndrome—DiGeorge's syndrome)		+	
Episodic lymphopenia with lymphocyto-			
toxin		+	
Immunodeficiency with normal or hyper-			
immunoglobulinemia	+		
Immunodeficiency with ataxia telangiec-			
tasia	+	+	
Immunodeficiency with thrombocyto-			
penia with eczema (Wiskott-Aldrich) Immunodeficiency with thymoma	+	+	
Immunodeficiency with thymoma Immunodeficiency with short-limbed	-	+	
dwarfism	+	+	
Immuncdeficiency with generalized	'		
hematopoietic hypoplasia			+
Severe combined immunodeficiency			+
(a) autosomal recessive			
(b) X-linked			
(c) sporadic			
Variable immunodeficiency (common,			
largely unclassified)	+	+	

and thymus glands. This abnormality has not had a familial incidence and does not appear to be hereditary, but seems rather to be the consequence of some intrauterine accident. All infants with this syndrome thus far studied have manifested neonatal tetany. The hypocalcemia tends to ameliorate with age during the first year of life. Hypertelorism, a shortened lip philtrum, low-set, notched pinnae, and nasal clefts cause these infants to resemble each other. In addition, anomalies of the great blood vessels are almost always present; tetralogy of Fallot and right-sided aortic arch are commonly encountered defects.

Infants with thymic aplasia who survive the neonatal period exhibit untoward susceptibility to viral, fungal, and bacterial infections which may ultimately be overwhelming. At autopsy some parathyroid tissue and a miniature thymus gland may be found in an ectopic position upon careful sectioning of the neck organs. The lymphoid tissue, bone marrow, spleen, and gastrointestinal tracts have normal numbers of plasma cells, and cortical germinal centers are normal. The sub-

cortical "thymic-dependent region" exhibits moderate to severe depletion of lymphocytes so that the reticulum cells appear to be prominent in this area. The lymphoid sheaths of the spleen are also depleted of lymphocytes.

Antibody responses to primary and secondary stimuli are normal. Serum concentrations of immunoglobulins are normal. On the other hand, delayed hypersensitivity is not manifested to common antigens, such as Candida or streptokinase. Sensitization to dinitrofluorobenzene (DNFB) is unsuccessful or yields a weakly positive result. Skin allograft rejection has been absent or abnormally delayed. Lymphocyte transfer tests and macrophage-immobilizing factor synthesis are abnormal. The peripheral blood lymphocytes respond poorly, if at all, to *in vitro* stimulation by phytohemagglutinin, allogenic cells, and anti-lymphocyte serum.

All of these deficits in *in vitro* and *in vivo* lymphocyte function were dramatically reversed by transplants of fetal thymic tissue into two children with this syndrome. Increase in lymphocyte count, population of "thymic-dependent" areas, normal skin allograft rejection, normal responses to intradermal antigens and to DNFB, as well as normalization of phytohemagglutinin response *in vitro*, have been documented. Furthermore, these corrections have become apparent as early as 48 hours after the transplants, which suggests that lymphocytic recognition mechanisms in these infants are intact and that fetal thymus tissue provides some critical element in their responsiveness.

More recently it has been appreciated that an incomplete form of the syndrome results in a clinically more benign course. Death may occur later in childhood from the cardiac anomalies, rather than from infectious complications.

SEVERE COMBINED IMMUNODEFICIENCY

In 1950 Glanzmann and Riniker described two unrelated infants who succumbed to overwhelming infection during the second year of life after a life-long succession of serious infections, including intractable diarrhea, thrush, and persistent morbiliform rash. They noted persistent and profound lymphopenia in these two infants and thus called this disease essential lymphocytophthisis. Several hundred cases of this disease have by now been described. It has been designated by various authors as alymphocytosis, the Swiss type of agam-

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maglobulinemia, thymic alymphoplasia, thymic dysplasia, lymphopenic agammaglobulinemia, and so on. At least part of this confusion in terminology results from the fact that two different modes of inheritance of the phenocopy are fairly clearly established. In the early European descriptions it appeared that the disease was transmitted as an autosomal recessive phenomenon; consanguinity among approximately one third of parents of affected children was documented. Further studies of affected families in America and Europe strongly suggested a possible X-linked mode of transmission of the defect. This supposition was based on (1) the documentation of affected males in three generations, (2) the appearance of the disease in sons of identical twin mothers, and (3) the appearance of the disease in sons of a single mother with differing paternities. The fact that the phenocopy can arise from two different modes of inheritance, both autosomal and X-linked recessive, probably accounts for the 3:1 ratio of males and females observed in the reported cases. This defect accounts for 10 per cent of the infant mortality if neonatal deaths are excluded.

For purposes of clinical descriptions it is probably easiest to lump the two genetic types because there is no discernible difference in their clinical course, nor, for that matter, can they be separated on grounds of the morbid anatomy of the disease. In any case, infection starts early, at between three and six months of age, and a rapid succession of debilitating infections brings about early demise; death within the first two years of life is the rule. Almost all infants with this disease have loose, watery, chronic diarrhea. Frequently, stool cultures grow out Salmonella or enteropathic Escherichia coli strains. Pulmonary infection is also almost universally encountered. Abscesses of the lung containing Pseudomonas aerugenosa are a common cause of death, as is pneumonitis due to Pneumocystis carinii. Extensive moniliasis of the mouth or diaper area which persists beyond the neonatal period is often a first sign of the disease. Thrush is usually present even before any antibiotic therapy is instituted. Furthermore, these infants are incapable of limiting and terminating the most benign viral infections. Death has resulted from generalized chickenpox, measles with Hecht's giant cell pneumonia, and in a few instances from cytomegalovirus and adenovirus infection. Vaccination results in progressive, ultimately fatal vaccinia infection. BCG inoculation has also resulted in progressive BCG infection. In summary, these infants are prey to all kinds of viral, bacterial, fungal, and protozoan infection. This susceptibility is usually manifested by skin pulmonary, and gastrointestinal infection. Ultimately the infants fail to thrive and the lack of weight gain causes the appearance of runting, which may be aggravated by protein-losing enteropathy.

In 1958 the Swiss workers pointed out that agammaglobulinemia is a prominent feature of this disease entity. Serum concentrations of immunoglobulins are very low, and the IgG may exhibit restricted heterogeneity. No antibody synthesis can be detected. Acute phase-reacting proteins rise in the usual manner with infection. Clq, a component of the complement system, has been reported to be low in some cases, but this is not an invariable finding. Interferon synthesis is normal.

A number of infants with thymic dysplasia have also been reported to have dysgammaglobulinemia with only IgM or IgG and IgA in their serum or normal immunoglobulins. It may lead to a spurious conclusion if all of these variations are classified by the presence of one or another immunoglobulin in the serum, since variations in immunoglobulin pattern have been observed in siblings of an affected kindred.

Leukopenia is usually encountered because of the low lymphpocyte counts, usually less than 2,000/mm³. The lymphocyte count may be variable and decline from initial normal neonatal levels (3,000/mm³) to more profoundly lymphopenic levels. A single lymphocyte count is, nonetheless, not a reliable index of the disease, as normal lymphocyte counts can be observed. Electron microscopy reveals that these blood lymphocytes are mostly very immature forms resembling lymphoblasts. Granulocytes and platelets are normal, although no leukocytosis may occur in the presence of overt infection. Eosinophilia is common, and abnormal granulation of the eosinophils has been reported.

The bone marrow is uniformly deficient in plasma cells, lymphocytes and lymphoblasts. Bone marrow of normal infants contains up to 20 per cent of cells in the lymphocytic series. This deficiency may well be the primary defect in this disease — the failure of formation of an immuno(Concluded on Page 199)

Voluntary Hyperventilation As A Cause Of Needless Drowning

Overbreathing Before Underwater Swimming Is Hazardous Practice

By W. D. Snively, Jr., M.D. and Jan Thuerbach

Many practices long thought to be harmless, such as waxing obese on a diet high in saturated fats, have proven to be dangerous, even deadly. So it is with the practice of breathing deeply before swimming under water. It now appears all too clear that such hyperventilation can induce a shallow water blackout brought on in simple terms from loss of consciousness induced by oxygen starvation of the brain that occurs before the swimmer receives an irrepressible physiologic signal to breathe. Several thousand persons die each year from drowning; it appears entirely possible that a goodly number of these drownings are caused by voluntary hyperventilation. And the very individuals that die in this manner are young, healthy, usually competent, swimmers. How many times we have read or heard, "He was an excellent

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This paper appeared in the June, 1972 issue if the Journal of the Indiana State Medical Society. It is reprinted with the permission of the authors and publisher through an arrangement with the State Medical Journal Group. swimmer. We just don't understand why he drowned!" Voluntary hyperventilation may well provide the answer.

Typically, drowning following hyperventilation occurs in this manner. A young man is trying to see how far he can swim under water, perhaps competing in a sense with himself, perhaps trying to better another person's record. He has learned from his agemates or perhaps from a swimming instructor that if he breathes rapidly and deeply for a minute, two minutes or more, he can stay under water for a relatively long period. And so he hyperventilates, then plunges into the water. Indeed, most individuals that do this no doubt accomplish what they set out to do. They swim for a relatively long distance under water and emerge happy with their accomplishment. But others simply don't come up. If friends have been watching they may recognize that the individual is in trouble, dive down and bring him up. But all too frequently the most energetic efforts at resuscitation are futile.

PHYSIOLOGIC MECHANISMS

Before examining a series of case histories, let us inquire into the mechanism of drowning caused underwater swimming following hyperventilation. Normally, arterial blood contains oxygen at a (Continued on Next Page) pressure of from 90 to 100 mm of mercury. Venous blood may have an oxygen tension of 40 mm of mercury. If, however, the arterial oxygen pressure (pO₂) drops below 60 mm of mercury it is inadequate to provide the brain with sufficient oxygen to maintain consciousness. The exact figure at which the individual loses consciousness can vary with age, conditioning, carbon dioxide tension, and perhaps special susceptibilities. The body contains special sensors that detect dangerously low oxygen concentration and signal the need to breath. But the signal is a weak one; it can easily be suppressed, especially by a swimmer who is concentrating on endurance and the achievement of a challenging goal.

Far more important than oxygen in signalling the need to breathe is the level of carbon dioxide. Its normal tension ranges between 40 to 50 mm of mercury. When it rises above this level it stimulates sensors in the brain and carotid vessels sparking an irrepressible desire to breathe. Now what hyperventilation does is to lower the carbon dioxide tension in the body without importantly changing the oxygen stores. It also causes a reduction in the amount of circulating carbon dioxide (which with water provides carbonic acid, the important acid component of our body fluid). The result is a condition of respiratory alkalosis brought about by carbon dioxide deficit. Respiratory alkalosis interferes with nerve conduction and causes symptoms of hyperventilation, numbness and tingling especially about the mouth and of the hands and feet. In addition, the low pressure of carbon dioxide causes constriction of the blood vessels that supply the brain.

So our swimmer, having enthusiastically hyperventilated, submerges with a reduced carbon dioxide tension depending upon how long and how vigorously he has hyperventilated, and with constricted cerebral blood vessels. As he vigorously swims underwater, the tiny quantities of oxygen stored in the blood become exhausted. And they become exhausted before the carbon dioxide tension can rise enough to stimulate an irrepressible urge to breathe. Deprived of oxygen, the swimmer becomes unconscious, hence cannot respond to the rise in carbon dioxide that will occur with time. Instead, usually while continuing his swimming movements. he starts breathing and unless he is promptly rescued and resuscitated he will aspirate water and will drown.

SOME LIVE TO TELL ABOUT IT

Reports of individuals who suffered loss of consciousness while swimming underwater and did not drown are instructive. These are reported by Craig². An excellent swimmer, age 27, hyperventilated for two minutes before swimming under water. Endeavoring to swim 200 feet he remembered passing a pool ladder 40 feet from the end. When he reached the end of the pool he surfaced and regained consciousness but remembered nothing after passing the ladder.

Another good swimmer, 18 years old, hyperventilated for one minute before swimming under water. He swam two laps then felt a need for breath. But reminding himself of the goal he had established, he managed to suppress the urge to breathe. He forgot everything for the third lap. When he surfaced, he coughed and gasped but did not lift his head above the surface. A nearby swimmer, who had been watching the swim, immediately raised the boy's head above the water and he regained consciousness in two or three breaths.

Another boy hyperventilated for two minutes. Under water he felt he could swim forever, but when partly through his swim he blacked out. When he came to he was on the surface of the water. Dizzy and exhausted he swam for shore. He managed to stagger out but had a headache for the next hour, could remember no decision to surface.

A 14-year-old hyperventilated for "quite a long time" until he felt dizziness and tingling of the hands and feet. Then he dived into the water and swam several feet beneath the surface for three laps of the 60 foot pool. He blacked out as he touched the wall but took several strokes of the fourth lap before he began to sink. An observer pulled him to the edge of the pool where he regained consciousness but recalled only the first three laps.

An 18-year-old boy hyperventilated in an effort to swim 120 feet. He noticed the urge to breathe during the middle of the second 60 feet but managed to go on. "Things turned tan." He next remembered lying on the edge of the pool with someabout halfway back his mind "went blank." Spec-

A 17-year-old took 10 or 12 "very deep breaths," swam 75 feet and was starting a second lap when about halfway back his mind "went blank." Spetators said he continued to swim and appeared to surface after about 160 feet. He then began to sink and was pulled out immediately. Artificial

respiration for two or three minutes was necessary to revive him.

Students were asked to swim one length of a 75 foot pool at the conclusion of a lifesaving class. One man had a "wonderful feeling that I could go, go, go." And while the rest of the class emerged after one lap, he made a turn and started to swim another lap. The instructor reached over the edge of the pool with his feet and pushed the swimmer on the back, at which he climbed out but did not seem to know where he was. He later said that he did not recall starting the second lap or climbing out of the pool. He had hyperventilated before beginning his swim.

A medical student, working as a lifeguard at a large outdoor pool, hyperventilated before swimming underwater. He was found on the bottom after he had gone about 120 feet. Taken from the water, he was flaccid and cyanotic. Five to seven minutes of artificial respiration were required to bring him around.

Other cases are reported by Strauss.¹¹ A 16-year-old trying to set a new record for himself for underwater swimming hyperventilated for five minutes. His mouth and fingertips became numb. He passed the 50 yard mark with no recollection of air hunger. He noticed a spreading numbness of his arms and legs. At the 60 yard mark he touched the wall and sank. Brought to the surface he coughed violently, vomited, then regained consciousness.

A 27-year-old, inactive man, tried to hold his breath for a new record while floating face down. He hyperventilated vigorously for 10 minutes until he was totally numb from head to foot. After three minutes he appeared to go limp. Carried from the water he was rigid and cyanotic. He was not breathing. When his mouth was forced open and the airway cleared, he began to breathe and regained consciousness.

CASE REPORTS OF DROWNINGS

The preceding were the fortunate individuals. Case reports describe others who died. While evidence concerning deaths from swimming under water following hyperventilation must perhaps be regarded as circumstantial since post mortem examinations cannot reveal with certainty the true cause of death, the conclusion is reasonably justified that the deaths occurred from blackout under water caused by hyperventilation plus vigorous swimming.

These reports are from Craig²: A young college swimmer desired to swim 150 feet under water.

He swam for some time before he attempted the underwater swim. Suddenly the lifeguard saw the individual on the bottom at the deep end of the pool. He could not have been there more than a minute. Brought from the pool the young man was immediately given artificial respiration, followed by mouth-to-mouth breathing, but the instructor was unable to move any air. A machine resuscitator was no more successful. Autopsy revealed the lungs to be full of water.

A 21-year-old swimming instructor hyperventilated then swam 120 feet underwater when one of the students noticed he was in trouble. Pulled out immediately, members of a fire department used a resuscitator on him. Two physicians were summoned from nearby but their efforts were unavailing. The individual died. No autopsy was performed.

Quite interestingly, many writers who have not cited specific cases allude to persons who have died from hyperventilation before swimming under water. Gray⁸ emphasizes that the "still very common practice of hyperventilation to increase under water endurance is dangerous and has caused many deaths."

Webster⁹ points out that "swimming underwater for endurance, with the accompanying danger of hyperventilation, accounted for six deaths; revival of these victims was not possible even though the accidents in most instances were witnessed and the victims were quickly brought out of the water for application of first aid."

A recent newspaper report, which stimulated the writing of this article, described the case of an outstanding swimmer who drowned in a closely supervised pool, among friends, while swimming underwater. Having just finished a number of sprint laps, he took several deep breaths and started swimming underwater. His body was seen just after that, motionless in the shallow end of the pool. Autopsy findings showed no possible alternative cause of death other than blackout following hyperventilation.

COMMENT

The tiny number of documented case histories of death following underwater swimming after hyperventilation is dangerously deceiving. It should probably be multiplied by thousands, perhaps tens of thousands, to approach an accurate figure and thus duly reflect the inherent hazards.

Almost all of the recorded victims of drowning or near drowning were reputedly good swimmers.

(Continued on Next Page)

experienced in underwater swimming. The "hyperventilation-before-swimming-under-water" syndrome, therefore, may well explain many if not most of the deaths by drowning of experienced swimmers.

A Common Practice. Both authors, when unaware of the hazards, engaged in hyperventilation before swimming underwater and, incidentally, have been duly impressed with the distances they swam. The procedure seemed so innocuous that the possibility of danger never even occurred. It is not surprising, then, that such hyperventilating is a common practice among persons attempting endurance swimming underwater.

The senior author has repeatedly quizzed nursing students, the question being: "How many of you have breathed deeply and rapidly in order to swim farther underwater?" About 40 per cent of the students in southern Indiana responded affirmatively, about 60 per cent in Michigan, which abounds in lakes and hence in swimming opportunities.

The Goad of Competition. Another factor is strongly involved in deaths from swimming under water after hyperventilating and that is the competitive urge. Persons who are driven toward a goal, whether they are competing with themselves or others, will fight desperately to overcome the urge to breathe when the signal first intrudes on their consciousness. Craig adds that "preoccupation with a goal may also affect how the subject will sense and interpret his physiologic warning bell telling him to come up for air." This signal, of course, is the rising level of carbon dioxide in the blood. And if the swimmer is successful in suppressing the urge to breathe, oxygen deprivation of the brain takes over and the individual blacks out.

Some persons appear to be particularly sensitive to hyperventilation and perhaps more prone to shallow water blackout. Another factor that frequently enters in is overexertion. Strenuous exercise appears to increase one's tolerance of lowered carbon dioxide tension. This, of course, enhances the probability of cerebral hypoxia; the most dreadful aspect of hypoxia is that consciousness is lost with little warning. When one faints he has several seconds warning. But hypoxic subjects, swimming underwater, may continue their swimming activity in the period between loss of consciousness and final collapse. Indeed, after blackout occurs, many swimmers continue to make coordinated movements, one even executed a turn

on to the next lap beyond the point that he recalled. Therefore, even if the victims are fortunate enough to have spectators, the latter will probably not suspect that a problem exists until final collapse occurs.

Effects of Hyperventilation. The physiologic effects experienced by swimmers in shallow water blackout closely resemble the reactions noted when a person breathes deeply and rapidly out of water. Some question whether one can render himself unconscious in this manner. But such unconsciousness has been reported and, in fact, a medical student died because of hyperventilation carried out in a physiological experiment.

Persons lowly placed on the rungs of society have a way of discovering such basic truths. Several centuries ago, seamen performing under the savage punishment codes of the English navy, sentenced to flogging until unconsciousness should supervene, discovered that by breathing deeply and rapidly before the flogging they would become unconscious sooner. Similarly, convicts desiring to end an intolerable existence have reportedly hyperventilated then submerged their heads in the toilet bowls in their cells, taking the precaution of propping their bodies, and thereby committing suicide in a relatively unpainful manner.

Specifically, the symptoms of hyperventilation include tremors, lightheadedness, double vision, vertigo, epileptic-like seizures, coldness of the arms and legs, irritability, decreased ability to concentrate, diuresis, hunger, and EEG changes. Likewise, the systemic effects of hyperventilation are significant: low blood pressure, constriction of the blood vessels of the brain, decreased brain blood flow, vasoconstriction of the peripheral vessels, and certain EKG abnormalities that are consistent with hypoxia.

TREATMENT

Unfortunately little can be said for immediate treatment of persons apparently drowned after swimming underwater following hyperventilation. Indeed, they seem to be singularly resistent to resuscitation, probably because the immediate stimulus for their drowning was hypoxia. As Wong and Grace⁶ point out, survivors of near drowning should be hospitalized and given prolonged intermittent positive pressure breathing with 100 per cent oxygen. Immediate efforts should be made to correct the serious blood volume and electrolyte derangements that occur. Still, prevention is ever so much better than treatment and prevention

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Editorials

AREA HEALTH SCIENCE EDUCATION CENTER

The Rhode Island Advisory Committee of the Medical Care and Education Foundation, Inc. (Tri-State Regional Medical Program) has approved of the filing of a request for a grant to establish an Area Health Science Education Center.

Such a Center is defined as "a consortium of health care providers, educators and administrators of health manpower training programs in Rhode Island, for the purpose of planning and coordinating an integrated and sound approach to health manpower preparation and continuing education. This proposal does *not* recommend the creation of a separate Health Science College, or another institution of similar dimension that would compete with or disrupt ongoing programs."

Basically the proposal stems from recommendations of the Manpower Task Force, Governor's Conference on Health Care Costs.

Rhode Island, like other states, has experienced a relatively unplanned growth of medical facilities and training programs. It is presumed that one of the acute problems is the shortage of health manpower at all levels.

The M.D. degree program at Brown University has finally been approved. Opportunities for nursing education have been improved by the growth of the associate degree program at R. I. Junior College, the introduction of the baccalaureate degree program at Rhode Island College, and the expansion of the already established URI program in nursing to include a curriculum leading to a Master's Degree. The College of Pharmacy at URI has, since 1957, become one of the strongest health science undergraduate and graduate programs in the nation.

The public institutions of the state have a total of 18 allied health manpower education programs, and the private institutions, such as Brown University, Providence College and Salve Regina College, have five undergraduate health science edu-

cation programs. About five allied health training programs are in operation through the Office of Vocational Education, at secondary schools in different parts of the state. Two more are to be implemented by 1972.

It is difficult to estimate how many more health manpower training programs are in existence, as many are carried out informally, and are not publicized, such as hospital programs training inhalation therapists, x-ray technicians, and nursing aides.

Thus the Health Science Education Center is sought to coordinate the preparation of health manpower, whether this training occurs in universities, colleges, schools, hospitals, or health centers. With key health science educators and health service providers as advisors, all selected from public annd private health care institutions of the state, the Center hopes to make recommendations on issues of curriculum, manpower usage and licensure, and financial support as well on all planning for new manpower training programs. In addition, it aspires to provide direct assistance and advice to those planning specific training programs.

As the study committee noted in its report, "the solution is more complex than increasing the number of trained health manpower: We must train correct categories and numbers of manpower in a high quality and efficient manner which is fair to the trainee and to the society he will serve. And such training of necessity must occur in close coordination with all other manpower programs."

The Center has indicated that it would cooperate with other agencies in working towards a moratorium on state licensure of any additional health occupations to permit time for study of alternatives to the present licensing system which would assure minimum standards of quality while allowing innovations in manpower development.

RUBELLA TESTING ACT (H 5557) A GOOD BILL

Governor Frank Licht recently signed into law a bill, introduced into the House of Representatives by Representative Robert Sweeney, which requires a rubella hemagglutination inhibition test before a marriage license can be issued. Thus Rhode Island, as far as we can determine, is the second state (after Colorado) to enact such legis-

(Continued on next page)

lation. Realizing that this proposal would elevate the quality of preventive medical care in the state by reducing the risk of German measles (rubella) and that it would specifically decrease the incidence of rubella in pregnant women, the Public Laws Committee of the Society vigorously supported the measure. Much credit should be given to Doctors Andrew Blazar and Peter L. Mathieu, Jr. for their indefatigable interest and assistance and to the members of the Senate and House

Health, Education and Welfare Committees for recognizing and approving a superior piece of health legislation.

Based on testing of premarital specimens, as is already being done for syphilis, the Health Department can advise those persons not showing evidence of rubella immunity to be vaccinated; those with evidence of previous rubella infection can be reassured that, even if directly exposed, the chances of contracting the disease are remote.

A LETTER OF RECOMMENDATION

GOOD-BYE, JOHN KNOWLES*

Board of Trustees Rockefeller Foundation Dear Sirs:

We are delighted to be writing a letter of recommendation for our colleague John H. Knowles. John has been a fine physician and has done some nice work in pulmonary diseases. We realize that you're not hiring him on as a doctor, but can assure you that he's come a long way since when he practiced and taught medicine.

First, he's an adroit headline-grabber, and works hard at this field of endeavor. Sunday, April 9 was a relatively slow day in Boston, and John managed to commandeer a little over a page and a half in the Sunday Advertiser, including a fresh photo of himself almost six inches square.

Second, he's free to speak out without being hampered by facts. He can fabricate a statistic with the best. Look at this eye-catching headline: "30% of Mass. Doctors Fleece the Public". What an inspired figure — 30%; this is small enough

to be in the minority, large enough to be important, and round enough to fit into large print. (Suppose he had decided on 14.67%? See what we mean?)

Third, he can stiflle opposition economically and effectively. In expressing his amusement at disagreement with his pronouncements, he clobbers his critics with, "The more they protest, the more they are guilty of being among the 30%."

Fourth, he'll surely modernize the respectable, scientific, sober image of your institution. Look what he did for the Massachusetts General Hospital. Maybe he can even contrive a magazine article on the 10 best Foundations, and get you in as number two or three.

Fifth, John can But that's enough.

To show you what we think of him, we can proudly report that our board sincerely wishes him good luck in his new job (by a vote of 3 to 2 with 11 abstentions.)

Sincerely yours,

The Editorial Board

Worcester Medical News

^{*}Reprinted from the Worcester Medical News, May-June 1972, with the permission of the publisher.



MANUSCRIPTS

Manuscripts for publication and correspondence relating to them should be sent to:

Editor, Rhode Island Medical Journal 106 Francis Street

Providence, Rhode Island 02903

Manuscripts should be typewritten on one side of the paper only, double-spaced, and with liberal margins. References should be placed at the end of the article and should be listed according to the order in which they are cited in the text.

References should be based on the form used in INDEX MEDICUS giving author (co-authors up to

three; et al. for more than three) with initials, title of article omitting all but first capital, title of journal, volume, first and last pages, month (week), year (e.g.,

¹Doe J, Blank RS: New approaches to . . . Rhode Island Med J 92:100-110, Feb 80

Journal titles should be listed as they existed at the time of publication.

References to books, monographs, and pamphlets should indicate the author(s), title, publisher's name, place and date of publication, edition, and page number of the reference.

PRIMARY IMMUNODEFICIENCY DISEASES

(Concluded From Page 192)

potential cell which originates from the marrow. Lymph node biopsy, when feasible, exhibits a complete lack of germinal elements, plasma cells, and lymphocytes. Only the stroma of the node is seen to contain occasional mast cells and eosinophils, or, rarely, small collections of lymphoid cells without any apparent organization.

None of the parameters of delayed sensitivity can be elicited in these infants. They are unresponsive to Candida antigen in the presence of overt. chronic Candida infection. They cannot be sensitizzed to DNFB. The peripheral blood lymphocytes are commonly unresponsive to phytohemagglutinin or allogenic stimulation. Skin grafts are accepted with no microscopic or macroscopic signs of rejection. At autopsy, no lymphoid tissue is found in the spleen, tonsils, appendix, and intestines. The thymus gland is found with difficulty in the neck, the gland usually having failed to descend in the normal manner into the anterior mediastinum. It weighs less than 1 g and is composed of primordial spindle-shaped cells, occasionally forming swirls or rosettes. No Hassall's corpuscles and few, if any, lymphocytes are present. The dysplasia of the thymus gland is the uniformly characteristic feature of this entity.

Very little inflammatory reaction is seen in extensively infected tissue, such as lung, skin, or in testines. Intravascular coagulation has been noted in a few infants who died of a complicating hemolytic-uremic syndrome.

Gamma globulin therapy is of no avail in averting the inexorably fatal outcome of the defect. Attempts to restore immunological competence with thymus grafts, fetal hemopoietic cells, and bone marrow transplants have, in the past, uniformly failed to achieve this end. Although transitory beneficial effects have been achieved, the risk is grave, graft-vs-host disease having resulted in several fatalities. This complication has arisen following bone marrow or whole blood transfusion. In one case, persistence of transplacentally acquired maternal lymphoid cells was recorded. In any event a characteristic maculopapular rash starting on the face heralds the onset of graft-vs-host disease about seven days after the administration of immunocompetent cells. The rash spreads rapidly

to involve ultimately all skin surfaces, including the palms and soles. Thrombocytopenia, leukopenia, jaundice, and anasarca follow in quick succession, and the bone marrow aplasia leads to death from massive hemorrhage by the 12th to 14th day. On the basis of experimental observations, it has been reasoned that transplants of bone marrow cells as a source of immunopotential stem cells would restore immunological competence to these infants. It is also apparent from the aforementioned misadventures that it would be necessary to circumvent the difficulties of graft-vs-host disease by administering completely histocompatible bone marrow cells. A histocompatibility difference at only one allele of the HL-A locus has resulted in explosive graft-vs-host reactions. Several patients have been immunologically restored with bone marrow cells from normal siblings who were histocompatible by direct leukocyte typing and by mixed leukocyte culture; that is, the patient's leukocytes did not provoke tritiated thymidine uptake by the donor cells in vitro. The therapeutic approach to this disease seems very promising, not only in terms of restoring these fatally afflicted infants to health but also in the elucidation of the ontogeny of immunological competence in man. Transplants of histocompatible marrow are now established to be a successful therapeutic, indeed life-saving, device for these infants. The problem of performing such transplants through the histocompatibility barrier remains to be solved.



Hoerr's Law

It is difficult to make the asymptomatic patient feel better.

. . . Stanley Hoerr, M.D., surgeon.

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VOLUNTARY HYPERVENTILATION AS A CAUSE OF NEEDLESS DROWNING

(Concluded From Page 196) consists quite simply of advising coaches, teachers, students, and swimmers of the deadly hazard of

hyperventilation before swimming under water.

Conversations with experienced swimmers, coaches and experts in the field of athletics reveal that many instructors still advocate deep breathing techniques. Obviously, those versed in the details of physiology caution against this hazardous practice even though, admittedly, the hazard is a matter of degree. Craig² points out that taking a few deep breaths before diving in and swimming underwater is not likely to cause difficulty. In a series of studies, approximately 3,000 children swam underwater after taking just a few deep breaths before any incidents of loss of consciousness occurred. So underwater swimming is probably quite safe in the absence of prolonged hyperventilation. It is extreme hyperventilation that counteracts the built-in warnings that urge the swimmer to come to the surface, permitting him to proceed to his doom without any real desire to breathe.

Considering, however, the varying susceptibilities of different individuals to the effects of excessive breathing practices, and in view of the diverse interpretations of "just a few deep breaths," perhaps the practice of hyperventilating before swimming underwater should be discarded entirely.

It must also be borne in mind that hyperventilation can result from vigorous exercise; and, therefore, the individual should be cautioned against swimming underwater if he has recently swum vigorously on the surface of the water.

DIVERS HAVE BREATHING TECHNIQUE

Korean women who dive for a livelihood, known as ama, indulge in light hyperventilation prior to diving. "Before each dive, they hyperventilate, pursing their lips and in many loud whistles that can be heard for long distances." Upon emergence they repeat this maneuver which they claim "protects their lungs". Perhaps the ama have learned over the centuries that hyperventilation helps but that it must be exceedingly mild if they are to stay out of danger. Perhaps through age old custom they have perfected a technique of getting ready for diving that limits the blowing off of carbon dioxide to a safe level. But until one learns the secret of the ama, the practice of hyperventilation should be avoided.

CONCLUSION

Overbreathing before preparing to swim under water is an obvious cause of needless death in healthy, vigorous, usually competent, swimmers. Individuals should be informed of the hazards of this practice and of the basic physiologic concepts involved.

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BOOK REVIEWS

(Concluded From Page 179)

discusses psychiatric problems and modern psychiatry, and how this branch of medicine uses words which are hostile in their common definition. Even psychiatrists don't agree on words used to describe diagnoses and disease categories, such as autistic, schizophrenic, and manic-depressive. The tremendous and rapid revolution in psychopharmacology in contrast to the slower revolution in psychodynamics has necessitated a revision of the psychiatric theory practice and dedication.

The review treats the major problems concerned with the great revolution in medicine. The style is good and the analysis of the modern revolution in medicine is informative. Appreciation is due Dr. Edward Luongo for this excellent text.

FAROUK ELATY, M.D.

WASHINGTON COUNTY MEDICAL SOCIETY

(Concluded From Page 182) NEW BUSINESS

The applications of Dr. Ingeborg Soche, Dr. James Guthrie, and Dr. George Hambly were brought forward by the Credential Committee.

Doctor Soche was accepted as a transfer from the Providence Medical Society.

Dr. James Guthrie's application was accepted and approved.

Dr. George Hambly's application will be held over since he is not living or practicing in this area at the moment. He will be notified and informed that he should apply to the Providence Medical Society. Then when he has moved to the area, a transfer will be possible.

The meeting was adjourned at 12:25 p.m.

An interesting talk on incorporating was given by Richard Abedon of the R. L. Abedon Company in Providence following the business meeting.

Respectfully submitted:

Francis M. Palaia, m.d. Secretary

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